

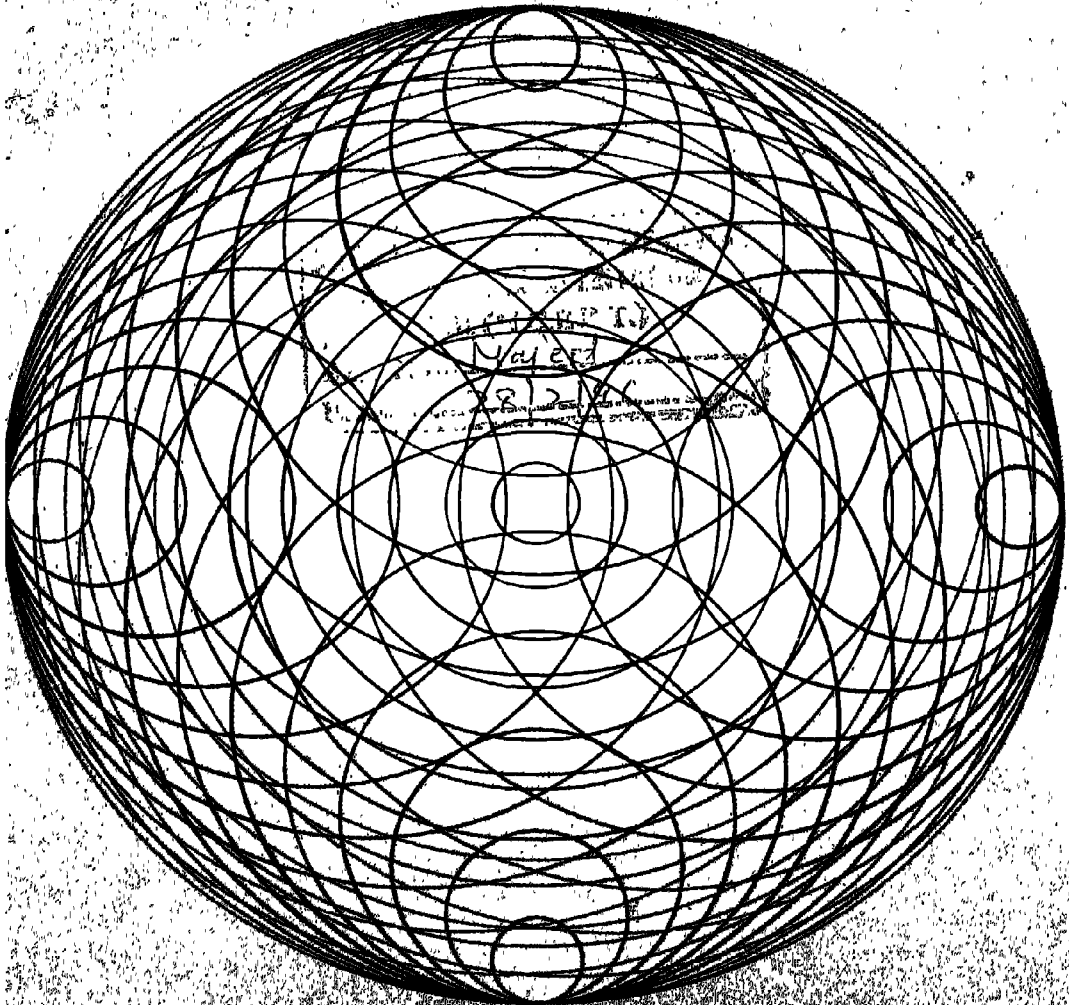
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The major features of the Primary Teacher are

1. Educational policies concerning primary education
2. Questions and answers
3. States round-up
4. Illustrated material for classroom use

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Editorial

Since time immemorial India has been a land of great thinkers and philosophers who have enriched her with their ideas and thoughts. Many of them have expressed their concern to make education life-centred and reality-based. The child has a creative spirit of his own which should be allowed to take shape. In the article 'Child and Tagorian Pedagogy' the authors have represented Gurudev Rabindranath Tagore's ideas and views on education as to how to make it child-centred. Children should be allowed to enjoy their childhood. Learning also takes place in a joyful conducive atmosphere. For this reason, many an educationists and psychologists suggested to use more and more play-way methods. In the article 'Creating a Joyful Learning Climate' a research was conducted to find out how much a joyful, interesting classroom atmosphere helps the young learner to learn in a happier mood than the rigid classroom teaching. It creates enthusiasm among young learners. Individual differences do reflect in the handwriting of a person. Through writing, one can express his on her thoughts and for the improvement of handwriting the role of the school is very much important. This has been reflected in the paper entitled 'Handwriting Errors and its Improvement'. However, it is through education that an all-round development of personality takes place. The paper 'School Should Promote Mental Health' has advocated that for healthy mental outlook of the child, the conducive environment of school and positive attitude of teachers towards children is most essential. The research paper 'Effectiveness of Mid-Day Meals Programme : An Evaluative Study' throws light on how mid-day meal has an impact on the enrolment and attendance in schools. Talking about interesting classroom atmosphere, it comes to mind that the teaching of language could be made easier, efficient and effective if the teacher uses some special techniques. The author has suggested some activities in his article 'How Can English Language Teaching Be Made Effective'. When a child learns while doing, it becomes permanent in his memory. In the article 'Improvisation of Apparatus', the author has advocated that content oriented teaching of science needs to be replaced by acquisition of concepts and conceptual schemes through improvised apparatus and activity-centred learning. The article 'Work Experience—Some Useful Teaching Strategies' provides guidelines for better preparation of teachers imparting instruction in Work Experience activities. One can take the full pleasure of reading a book once he enjoys reading. In the article 'Developing the Reading Habit in Children', authors have highlighted the different roles played

by the family, the teacher and the community at large and have included some specific suggestions. In another article entitled 'Wastage in Primary Education among the Tribal Children - A Comparative Study between Genders of Chenchus in Andhra Pradesh' the author has revealed several reasons for high rate of dropouts and voiced the concern that to check the educational wastage and stagnation it is necessary to control and contain the run-away absenteeism.

The Child and Tagorian Pedagogy

SWARNA PRAVA SAHOO
*Lecturer in Education,
Jayadev College of Education &
Technology, Naharkanta,
Dist : Khurda (Orissa)*

HRUSHIKESH SENAPATHY
*Lecturer in Education,
College of Teacher Education,
Kharavel Nagar,
Bhubaneswar (Orissa)*

NITYANANDA PRADHAN
*Lecturer in Education,
P G Department of Education,
D.A V College,
Koraput (Orissa).*

Our country has been enriched with the ideas and thoughts of great thinkers and philosophers. Many of them have expressed their views and opinions in the field of education so as to make it more and more free flowing and side by side life-centred. They have given importance to early childhood education and advocated freedom of child, to let him learn things by himself while playing. Gurudev Rabindranath Tagore has given emphasis to this aspect of child's education.

This paper intends to highlight —

- Potentialities of child
- How Tagore's views are different from that of other educationists' of the world
- How nature helps the young child to bloom and blossom in body and mind
- Religion and morality as an intimate part of life
- How narrow utilitarian motives of present system of education is not helping in attaining intellectual maturity and
- Aesthetic sensitiveness and education.

Child is a potential God. This principle is the key to the world of education. The whole philosophy of education revolves round it, and all

educational activities are thought of in the line of this idea. Children are not to be cursed or blamed because they are born ignorant. Nature has made them as such for they will have joy of knowledge. Children are not merely the children of dust. They are the spark of divinity. Their infinite potentiality transcends the finite. If we consider the child in this light, we shall be forced to recognise, as an absolute and urgent necessity, that care must be given to childhood, creating for it a suitable environment.

Child in Adult's World

The child can not lead a natural life in the complicated world of adults. The adult by his

continuous supervision, uninterrupted advice and dictatorial attitude disturbs and thwarts the development of the child. Child like other human beings, has a potentiality of his own. He carries within him the beauty and the dignity of the creative spirit, and these can never be erased, so that his soul which is pure and very sensitive requires most delicate care. We must not pre-occupy ourselves with body which is so tiny and so fragile. We must not think only of nourishing and washing and dressing him with great care.

Child is the father of man. We will know that this age of development is the most important period of the whole life. Moral malnutrition and intoxication of the spirit are as fatal for the soul of man as physical malnutrition is for the health of his body. Therefore child education is the most important problem of humanity.

Tagore and other Educationists

From eastern to western educationists all are interested for the child education. The great educationists like John Dewey, Montessori, Froebel, Pestalozzi, Rousseau, Gandhi, Sri Aurobindo, Swami Dayananda, Rabindranath Tagore all have experimented on child education. Their opinion and suggestions are not the same. Rabindranath Tagore is one of the educationists who has not only given suggestion but experimented deeply on child education. His conception of education is totally different from other educationists.

Tagore's emergency as an educator was completely a matter of personal development, a necessary result of the entire course of his life and experience. He had acquired more knowledge about education and its mysteries by successfully subjecting himself to the fullest and most varied educational experience that one could desire. He discovered for himself and lived all the theories and principles of education which he was later to formulate for himself and use in his Shantiniketan experiment.

Tagore as a Child Educator

In considering the educational aims of Tagore, it should be remembered that Tagore was not an educationist in the strictly academic sense, and although his educational writings constitute a voluminous literature, he did not write any single work systematically developing any particular thesis on education like Rousseau's *Emile* or Spencer's education but Tagore expressed his educational ideas directly and indirectly in numerous contexts. Though he was not a trained teacher still his indepth knowledge in education made him a renowned and successful educationist. For him each child is an ambassador of God. He feels all the divine qualities within a child. Something of the child must live within the adult man or his hand will not be able to pen down words for children. It was Tagore, the speaker of child's language, a child's most hidden dreams were no secret for him.

As a child educator he has given emphasis on the holistic development of the child which covers all the aspects like physical, intellectual, moral, spiritual etc. According to him education means enabling the mind to find out that ultimate truth which emancipates us from the bondage of the dust and gives us the wealth, not of things but of inner light, not of power but of love, making this truth its own and giving expression to it. Tagore as an educationist gives equal importance to every part of the child. The educational aims of Tagore is something different from other educationists.

Though education of the body is a most important factor in the education of an individual and finds a common place in educational thought, still it has been comparatively ignored in educational practice. In fact Tagore attached so much importance to the healthy physical development of children in early years that he eloquently advocated their free, spontaneous movements and play in joyous natural surroundings even at the expense of studies if necessary. Even if they

learnt nothing, he says, they would have had ample time for play, climbing trees, diving into ponds, plucking and tearing flowers, thus by perpetuating thousand and one mischiefs on nature, they would have obtained the nourishment of the body, happiness of mind and the satisfaction of the natural impulses of childhood. Education of the body in real sense, does not consist in play and exercise but in applying the body systematically to some useful work. Physical development includes training of body in different parts as well as the training of the sense. The beneficent influence of nature would help the young child to bloom and blossom in body and mind like plants and trees through the sheer exultant joy of being and living.

Tagore as a great liberal thinker and moral teacher believes firmly in moral values and religious sentiment but never put any faith in direct moral instruction. The moral instruction is worse than useless and it is harmful also. It generates a host of pretensions, pre-desires and bitter reactions. According to him, the real moral training consists not in foisting moral teachings like external decorations, but in making religion and morality an intimate part of life. To get by heart stereotyped slogans and to practise stereotyped rituals is not true religious education for us. True religiousness is as natural as respiration. It is as much a vital part of our being as breathing. It can't be confined to a meagre corner in our life. The principal aim of education according to Tagore is to produce the moral and spiritual man, the whole man. He emphasised moral training and development of character of inner disciplines, simple living, high thinking, tolerance, cooperation, truthfulness, sympathy, fellow

feeling etc., as the characteristics of moral character.

Present Education

One of the most dominant evils of our education system has been that it has encouraged slavery to books. Tagore made a clear distinction between the existing educational practices, emphasising bookish knowledge, and the real intellectual attainment. Our education inspires narrow utilitarian motives of passing examinations and entering a job as quickly as possible. Tagore felt that what is important is not the store of knowledge gained from books, but the ability to use what we learn and constant curiosity and alertness of the mind. In this connection, he pointed out the importance of scientific knowledge and scientific outlook.

Conclusion

Saint, philosopher and poet Tagore was a spiritualist through and through. Education in his scheme starts with unwarranted faith in the spiritual life. Tagore stressed an inner power and enlightenment. According to him, man belongs to two worlds, one of which lies within and the other outside. The major ideal of education is the development of personality. Education would lead to satisfaction of mind and the peace of soul. It should guide for communion with God. For Tagore the realization and the expression of beauty is the supreme objective in human life. His concept of beauty, according to true Indian tradition, is inseparably connected with truth and goodness. Whatever is true and noble in life, nature and art is also beautiful. Thus aesthetic sensitiveness in the true sense is a fundamental aspect of education.

Creating a Joyful Learning Climate

ARUN KUMAR
Assistant Teacher,
M.C.D. School,
Gautam Nagar, New Delhi

Learning takes place in a conducive and joyful atmosphere. To teach young children at the primary stage is an extremely difficult task. For this reason, many an educationists and psychologists suggested to use more and more play-way methods and to resort to concrete activities in putting an idea for effective and efficient learning. For effective learning it has to be child-centred and activity-based. The researcher has conducted a research on students of Standard I and II in Arrah district of Bihar. The result shows us that a joyful, interesting classroom atmosphere and play-way method creates enthusiasm among young learners.

Education is the wholesome development of man—body, mind and spirit. It is the only efficient way by which a society can be forwarded on the right path of prosperity.

The accelerated growth of information and knowledge has forced the educationists to search a joyful way by which easy and effective transfer of vast storehouse of knowledge in its correct conceptual shape can be achieved by majority of children. For achieving this goal, it requires skilled efforts to match mutually three distinct things: the organised information, the ability of learner and the teaching strategies. The ability of learner can be improved by creating a joyful learning climate as a teaching strategy.

It is a challenging job to teach students of primary level due to their stage of cognitive development. The world renowned child psychologists Jean Piaget (1953) has described that children with the age of 2 to 5 years are on pre-operational stage and 6 to 11 years on concrete-

operational stage. Later on Piaget (1972) realized that his results about age could not be generalized to adolescent population, since the subjects were taken from better schools in Geneva.

On this basis it can definitely be said that students of primary schools are either in pre-operational stage or concrete-operational stage. Pre-operational child acquires the internalization of thought process but the internalization of actions in which the child can make use of operations does not take place. Thinking dominated by perception is the limitation of this stage. The mental operation is limited to concrete and tangible information in concrete-operational stage.

Many an educationists and psychologists have suggested play-way method with using more and more concrete examples in explaining an idea in front of these primary students for better concept formation and later on concept

attainment Considering the above views in mind the researcher has done an experiment on children of primary level. The population for this study constitutes students of standard-I and standard-II in Arrah district (Bihar). Sample was randomly selected from a coeducational school. Two groups were made for each standard. One group of each standard was treated as experimental group and taught with play-way method mostly outside the class-room in play-ground or in garden. The sample consisted 160 boys and girls in which 40 boys and 40 girls out of 80 standard-I and 42 boys and 38 girls of total 80 of standard-II. A verbal pre-test of standard-I and written pre-test of standard-II was taken to find out the achievement level of the group. There was no significant difference between both the groups of each standard. After ensuring the comparability of the group, intervention was given to the experimental group.

Activities for Class-I

(A) Counting

- Counting with small stones
 - Counting with kanche (goli)
 - Counting with small old leaves and flowers
 - Counting with small fruits like—grapes, litchi, raps berry etc.
 - Counting with small toys
 - Counting with cheap toffees
- Stones, 'kanche', leaves, fruits, toys, toffees were used as teaching aids. Fruits, toys and toffees work also as reinforcement for children.

(B) Addition

It is a process of mixing and counting the whole.

Example — $2 \text{ toys} + 2 \text{ toys} = 4 \text{ toys}$

First of all two toys were given to a child and he was asked to count them. Again two toys were given and he was asked to count it. He was then asked to mix all toys and told to count them again. Thus the child learnt to count by himself/herself.

This process can be done with all the above mentioned teaching aids.

(C) Substraction

It is a process of breaking, reducing and decreasing. This concept was given using the following example. Two flowers were given to a student and he/she was asked to give one flower to his/her friend and asked how many flowers he has now ? This process can be done with other teaching aids mentioned above.

Activities for Class-II

(A) Concept of Addition

Addition is a process of mixing, increasing and counting to all in a row

Example -

$4 \text{ leaves} + 4 \text{ leaves} = 8 \text{ leaves}$

First of all 4 leaves were given to a student in one hand and told to count it. Again 4 leaves were given to the next hand and asked to count. Then told to mix all the leaves and to count all. By this process right answer came.

This process can be repeated with small stones, small toys, small fruits and toffees

(B) Concept of Deduction

Deduction is a process of breaking, shorting, expanding and decreasing.

Example —

Ten toffees were given to a student and he was asked to count these. Then teacher told him to give four toffees to his/her friends and asked how many toffees he or she has now ?

This process can be done with other teaching aids mentioned above

(C) Concept of Multiplication

It is a short cut sophisticated process of addition.

Example —

Multiplication

$2 \times 1 = 2$

Addition

00 one time

$2 \times 2 = 4$	00 + 00 two times
$2 \times 3 = 6$	00 + 00+00 three times
$2 \times 4 = 8$	00+00+00+00 four times
$2 \times 5 = 10$	00+00+00+00+00 five times
$2 \times 6 = 12$	00+00+00+00+00+00 six times
$2 \times 7 = 14$	00+00+00+00+00+00+00 seven times
$2 \times 8 = 16$	00+00+00+00+00+00+00+00 eight times
$2 \times 9 = 18$	00+00+00+00+00+00+00+00+00 nine times
$2 \times 10 = 20$	00+00+00+00+00+00+00+00+00+00 ten times

*Students were asked to count it on each step. Multiplication tables can be taught

in easy way by this process using small fruits, flowers, small stones, leaves etc.

1. Concept of Division

It is a short-cut and sophisticated process of deduction. It is a mixed process of multiplication and division

Example :

20 fruits were given to a student and he was asked to share these equally with his four friends. He was hinted to divide one fruit to each and to repeat this process till he can Count in each spell and total fruits upto that spell,

00000	— I spell —	5 fruits	20	I	-	$5 \times 4 = 20$
00000	— II spell —	10 fruits	$\frac{-5}{15}$	II	-	$5 \times 3 = 15$
00000	— III spell —	15 fruits	$\frac{-5}{10}$	III	-	$5 \times 2 = 10$
00000	— IV spell —	20 fruits	$\frac{-5}{15}$	IV	-	$5 \times 1 = 5$
			$\frac{-5}{0}$			

* process of deduction

However the concept of division can also be given by deduction and multiplication together.

$$5 \overline{) 20} \begin{array}{r} 20 \\ -20 \\ \hline 0 \end{array} 4$$

incorporating

* Mixed process of multiplication and deduction.

20 is Dividend,
5 is Divisor,
4 is Quotient
0 is remainder

These activities were given to children of class II. After 40 periods of two hours, both the groups

were tested. The following results were found:
1. Mean scores of children taught by play- way

method was ($M = N =$) and mean score of children taught by traditional teaching was $M =$ found to be ($+ = 5.18$). Hence two groups differ when tested for significance at 0.01 level of confidence. High mean score of the group taught by play-way method shows its effectiveness over traditional classroom teaching for standard I students.

2. 't' value 0.244 non-significant at 0.05 level of confidence was found when compared boys with girls of play-way method group, which shows no sex difference. On this basis, it can be said that sex does not create any barrier in understanding of concept.

3. On the basis of 't' value 0.356 non-significant at 0.05 level of confidence, it can be said that there is no sex difference when compared boys and girls of standard I taught through traditional method.

Result of Standard II

4. Mean scores of play-way method group higher than traditional teaching group and 't' value 4.235 significant at 0.01 level of confidence

show the effectiveness of play-way method over traditional teaching for standard-II students.

5. It was found 't' value 0.68 which is not significant at 0.05 level of confidence when compared boys and girls of standard-II taught through play-way method.

6. On the basis of obtained 't' value 0.87, non-significant at 0.05 level of confidence, it can be said that there is no sex difference when compared boys and girls of standard-II taught through traditional teaching.

The result of this study strongly pleads for creating the situation which should be joyful and charming for students of primary level. More and more concrete examples should be presented in front of them. Students of this age want always playing, so, they should be kept maximum time outside this class in play-ground or in garden. By this way they can not feel that they are being taught. They should be presented such concrete examples which they apply normally at the time of playing with their peer groups. By this method we can achieve our goal of education.

Handwriting Errors and its Improvement

M.P. BHARADWAJ
Parliamentary Interpreter
Rajya Sabha Secretariat
Parliament House,
New Delhi

Writing is an ability through which one can express his/her feelings, emotions and thoughts. The purpose of the writing will be served only if the handwriting is legible, easy to read. Individual differences do reflect in the handwriting of a person. Not only artist but general people also can write elegantly by following the basic principles. The principles are legibility, speed, uniformity, dose of acquisition, simplicity, neatness and aesthetics.

Education is the main instrument of change needed in a developing society like India. Illiteracy, the major hurdle in the process of development is a worldwide phenomenon. Today, we in India are facing the colossal problem of mass illiteracy and lack of education. As means of combating the problem of illiteracy, programmes like mass education, fundamental education, adult education, functional literacy etc are gaining importance.

No programme of mass education can dispense with the idea of development of linguistic capabilities of the people. Many of the motives behind learning to read and write are directly related to other vital efforts aimed at improvement of economical and social status and enrichment of one's life.

Ability to write is not only the hallmark of literacy, it is also an essential aid to individual progress and group welfare. In spite of the advent of typewriters, printing machines and photostat

technology, handwriting remains the principle tool of written expression, because it is handy and can represent the personal style with maximum elegance.

Every educated person aspires for a neat and beautiful handwriting. He or she also makes conscious efforts to that end but the fact is that handwritings of all the people are not equally good. Some people write so elegantly that we cannot but praise with an open heart. Although it is not possible to make the handwriting of each and every person ideal or standard, handwriting can be improved substantially provided the basic principles underlying a good handwriting are understood and followed by making conscious and well-planned efforts in that direction.

What are the basic principles or main characteristics of a good handwriting? It would be better if we follow the rule of elimination by checking out what are not the characteristics of a good handwriting. There are certain misconcep-

tions with regard to a good handwriting. Some people mistake an embellished handwriting to be a good handwriting. Some people correlate a good handwriting to greatness of character or dexterity in drawing. Another misconception is that only quality is the main thing in the evaluation of handwriting and speed is not so significant a factor. Such misconceptions are based on the lack of comprehension of the principles underlying a good handwriting. They need to be cleared without loss of time.

Ornamentation or embellishment in handwriting is mainly a subject of art or drawing. It is calligraphy. Everyone cannot be a calligraphist. Secondly, a good handwriting is not a foolproof sign of the greatness or impeccability of someone's character. Great or good persons may have a good handwriting but it is not a practical premise that a good handwriting is a sure sign of a good and great character. It would not be out of place to add that handwriting may indicate certain traits of human character but, then, that is comparatively a nascent science and it is yet to be established in the arena of sciences. It is not possible to improve the handwriting of all the people to a standard form. Individual differences do reflect in the handwriting of a person despite best efforts at standardisation. However, successful efforts can be made to improve the handwriting to a certain level. In other words, not only artists but ordinary mortals can also write elegantly provided they follow and practise the basic principles of penmanship. And lastly, the speed factor cannot be overlooked while assessing handwriting.

The principles underlying the modern practices of teaching of handwriting are legibility, speed, uniformity, ease of acquisition, simplicity, neatness and aesthetics. Let us take each one of these principles separately to understand what they actually mean.

The first requirement of a good handwriting is that it should be legible. The purpose of writing is served only if it is easily read and defeated if

it is read with great difficulty or not read at all. There are certain factors that hamper the easy readability of a handwritten matter. They are faintness of ink, extremely small size of letters, confusion due to similar shapes of some letters and vowel signs (matras), especially in Devnagri script, confusion created by excessive embellishment of letters, illegibility due to hasty writing and illegibility due to blotches and overwriting. Faint ink and miniature writing create difficulty in visibility of letters, due to which the illegibility problem is created, illegibility problem is also created due to confusion in identification of letters. One such situation comes when one scribbles in haste without caring for readability of the written message. Secondly, the shapes of some letters and vowel sounds in Devnagri script are similar in look although they denote separate sounds e.g. -the letter म and भ घ and ञ य and श थ and थ च and थ द and ह ट, ठ and ढ. Similar confusion is created in vowel signs e.g. ई and ी, a and c etc. Similar examples can be given in Roman script also. Readability is also hampered due to excessive ornamentation of letters. The principle of simplicity is preferred these days to embellished or ornamented style of writing. The problem of illegibility is also created due to lack of neatness.

The second principle underlying the modern practices of teaching the art of handwriting is speed. Thinking preparator to writing may take sometime, but when it comes to writing, it should take place at a fairly fast speed. Some students can write a good hand but they take a lot of time in chiselling out the beautiful letters from the stylus. The quality of their handwriting is good but the speed of writing is so snailly that they take inordinately long time in writing a small paragraph. This is desirable neither in the practical life situations nor in the class room. As such the students with a snailly speed will find themselves at a disadvantage. Even from examination point of view, fast speed of writing proves a boon for

examinees. Thus the speed factor cannot be dispensed with while evaluating a handwriting sample.

The third basic principle of a good handwriting is uniformity. Maintenance of uniformity in handwriting creates an impression of harmony which fascinates our eyes and soothes our nerves. Even if the formation of letters may be less than standard, the handwriting will not look harsh if the same pattern of writing is maintained throughout. Factors damaging the uniformity are—lack of similarity, in slant of letters, the colour, the point of nib, the formation of letters, distance between lines and space between words not being the same from beginning to the end.

The fourth basic principles of a good handwriting is beauty of letters. This needs a bit of elaboration. Ease of acquisition is ensured when (i) the colour is fast (ii) the point of nib is sufficiently bold (iii) the shapes of the letters are distinct, and most importantly (iv) when the formation of letters is beautiful and 'articulate'. Beauty of letters includes a good balance ensured through right proportion of straight lines and curvatures plus an artistic inclination coupled with a natural (not consciously attempted) flourish of hand in style in the beginning, middle and end of the letter or wherever there is a facile scope for it. This forms the 'quality' factor of handwriting. The disposition of beautiful formation of letters can be easily given at the elementary stage of schooling if the teacher's own handwriting is beautiful. The elementary years of schooling are the best suited period for sustained practice of writing in order to establish the writing patterns of children and to ensure a fast speed with a good quality in the later years.

One more factor that positively contributes to the making of a good handwriting is the proper treatment of the available blank space. This comprises of :

- leaving the margin
- the indented spaces in the beginning of paragraphs being equal

- enough space between the words and
- proper alignment of lines.

Sometimes the quality of the handwriting of students is good but the impression is not the desired one due to their inability to use the available space with an aesthetic sense.

The last principle, but not the least, of a good handwriting is neatness. The handwriting should be free from blotches, cuttings and overwritings. However beautiful may the formation of letters be and however properly may the available space be used, a single blotch is enough to spoil impression of the whole writing. So the writing must be neat.

Hindi is written in Devnagri script. There is a general complaint of bad handwriting of Devnagri these days. The foundation of bad (or good) handwriting is laid during the primary stage of education. In India the programme of instruction in the pen-craft is marked by the general reluctance among teachers towards the diagnostic and remedial aspect of handwriting. If the defects of handwriting are highlighted and brought to the notice of students and if the standard version is displayed before them at the early stage of instruction, improvement in handwriting is possible.

The errors of handwriting can be categorised into several areas.

- Errors related to the writing material or stationery. Sometimes the lack of a good pen, good paper, fast colour (ink) and a smooth supporting hardboard account for an unimpressive handwriting.
- Errors related to formation of letters and vowel signs (matras). Pupils misform the alphabets due to lack of adequate instruction and practice at the elementary stage. Standard form of letters and vowel signs should be sufficiently practised by the students in the early stage. The letters should be adequately bold to ensure their easy visibility. Children should be made to

understand the minute differences between the shapes of similar looking letters. The headline should be straight and unbroken

- The third area of error is related to the proper and aesthetic use of the available space. Lack of proper margin, not indenting the paragraphs, not leaving enough and equal space between words, defective and non-uniform alignment of lines are responsible for an unsystematic, disorderly and uncouth handwriting.

The causes of error in handwriting can be divided into twelve broad categories -

1. *Physical and Physiological Factors*: Defect in finger of thumb, a defective eyesight and inadequate neuro-muscular coordination come under this category.
2. *Material Factors*: Lack of a good ink, good pen, good paper or slate and smooth supporting board, etc. come under this category.
3. *Factors Related to Posture*: Inconvenient way of sitting, wrong position of the writing material and a wrong way of holding pen, etc. come under this category.
4. *Environmental Factors*: Lack of proper light, excess of wind, cold or heat, disturbance due to noise, etc. are included in this category.
5. *Psychological Factors*: Lack of motivation, carelessness, distraction and emotional pressures come under this category.
6. *Neatness Factors*: Dirty hand, soiled clothes, leakage of ink from pen, excess ink at the tip of pen, are enumerated under this category.
7. *Parental Factors*: Illiterate parents, lack of parental encouragement and bad handwriting of elders and near ones.
8. *Teacher Factors*: Bad handwriting of teacher, lack of initiative on the part of teacher and ignorance of teacher about the remedial techniques.
9. *Administrative Factors*: Lack of handwriting competitions, not allowing separate marks

for handwriting in examinations and lack of graded syllabus for handwriting.

10. *Instructional Factors*: Lack of good handwriting scales for the evaluation of handwriting, lack of audiovisual aids, non-highlighting the defects of handwriting. Not keeping a proper record and track of those who need special guidance in this direction.
11. *Practice Factors*: Less stress on writing in home task, lack of proper checking of home task, wrong way of correcting the defects.
12. *Student Inclination Factors*: Sacrificing quality for speed, sacrificing speed for quality and sacrificing both speed and quality due to carelessness.

Conclusion

If these conclusions and suggestions are followed in schools they will positively contribute to the improvement of handwriting.

1. The Prerequisites

A good neuro-muscular coordination is necessary for a good handwriting. Sometimes the writing hand is tremulous. This is the symptom of a poor neuro-muscular coordination. Such students should take part in games and take regular exercise in order to ensure a good neuro-muscular coordination. Hands should be clean while writing. In some cases the hands become damp due to sweat in palms. Such students should keep a handkerchief to wipe off the dampness. The psychological pressures and impulses like fear, anxiety, anger that tend to disturb our mental stability, therefore, reassurance and concentration should not be allowed to come into play while writing. The teachers and parents should maintain an appropriate balance between rod and carrot i.e. between authority and sympathy, and should mete out proper reward, punishment and guidance at the right time.

2. Suitable Stationery

The physical prerequisites of writing include good stylus, a good paper, a good ink and a smooth hard board to place the paper on. The book from which the matter is being copied should be placed in front and near. The writer should adopt a convenient posture in which the backbone may not have to be bent. The paper should be about a foot away from the eyes. The neck should not be bent excessively. Any convenient posture can be adopted keeping the back and neck unbent and distance of eyes from paper about a foot.

3. Proper Control

Certain environmental factors may affect handwriting e.g. lack of proper light, temperature, favourable speed of wind and a place secure from rain, dust etc. So due care should be taken to keep these factors under a favourable control.

4. Practice

The importance of practice for achieving proficiency in any skill cannot be overemphasized. This holds good for handwriting also. Sustained practice at school and home is necessary for ensuring a good handwriting.

5. Model

Children emulate the model to which they are exposed. The impact of the handwriting of a teacher, parent or any other member of family on the handwriting of the students can be easily noticed. Good handwriting of a teacher will unconsciously influence the handwriting of students. The samples of good handwriting should be displayed to the students so that they can get inspiration from them.

6. Remedial Treatment

Handwriting scales are used to evaluate the

quality of handwriting. Five or six samples of handwritings are displayed on the handwriting scale in the decreasing order of their quality, with marks allotted to each. The handwriting of a student is assessed by comparing it with samples depicted on the handwriting scale and giving marks written against that sample. Monthly test in handwriting should be given to students to assess the degree of improvement and a record of the scores achieved should be kept. This will not only facilitate identifying the students with bad handwriting but also the diagnosis of the areas of their errors. In this way the remedial treatment can also be devised according to their needs.

7. Instructional Material

In India the programme of instruction in penmanship is marked by a dearth of proper instructional material. Instructional aids should be prepared as per the requirements of the innovative techniques developed for the remedial treatment of the handwriting. Following instructional materials can be prepared to serve the purpose —

- Class syllabus or attainable goals classwise in the skill of handwriting;
- Handwriting scales for various age groups;
- Filmstrips and slides;
- Guidelines for teachers and workbooks for students, and
- Charts highlighting the correct way of writing different letters, joint letter, vowel sign and their parts as well as the probable errors in writing.

8. Motivation

The importance of motivation in learning is well established. The children should be properly motivated in the classroom by teachers and at home by parents. Following steps can be undertaken in this regard :

- Informal writing situation should be created every now and then in which students should be asked to write letters to their near and dear ones or write a paragraph on any of the subjects of their liking
- Handwriting competition should be held periodically and recognition in form of an award or appreciation should be given to the students who achieve first, second and third places

School Should Promote Mental Health

N.N PRAHALLADA

Reader in Education

Regional College of Education, Mysore

Education aims at all round development of child. It is education through which socially desirable changes can be brought about in the physical, mental, emotional aspects of a child's personality. Thus it is essential that schools must play an active role for promoting mental health. A mentally healthy person is one who can develop healthy outlook and attitude towards life. For the enhancement of mental health programme the conducive environment of school and positive attitude of teachers towards children is most essential.

The concept of mental health is relatively recent. It refers to that condition of an individual which results from the normal organisation and functioning of his mind. A mentally healthy person is one who has a wholesome and balanced personality free from schisms and inconsistencies, emotional and nervous tensions, discords and conflicts. According to some statistics, about 50 per cent of all patients who go to doctors have emotional problems.

Mental hygiene and mental health are not merely a medical subject concerning only psychiatrists, general medical practitioners and social workers, but each of us has a say about it. Every year tens of thousands of people break down under the stress and strain of daily life. The question is how to minimise this trend if not to eradicate it completely.

Education should answer this question because it is the only instrument through which socially desirable changes can be brought about. Therefore, it is essential that schools must take

up the task of promoting mental health. Our schools have not taken effective steps to inculcate in the pupils a healthy outlook and attitude towards life. This is because education even today is excessively examination and degree-oriented. Added to this, teachers mostly adopt and depend on traditional methods of teaching. The need is to replace the traditional approach by the mental health approach.

Mental hygiene and education are complementary and not contradictory because the aim of both is adjustment. Lack of adjustment leads to learning disabilities and other problems such as repeated failure, humiliation, apathy, defeat and growing defiance and delinquency. Mental health must be given a high priority in our social, educational and political scheme of things.

According to Nikelly, "the mentally healthy student accepts himself with his strong points and his shortcomings; he makes the best use of what he has, and does not allow his personal weakness to interfere with his daily activities and

pursuit of long range goals. If the positive factors in his personality are accentuated, the weaknesses, in most cases, will retreat. The emotionally healthy student reaches a balance between his instincts and his conscience, coupled with the demands of his environment. He experiences little conflict between these feelings and he can tolerate a moderate amount of inconvenience resulting from conflicts, among drive values, and the experiences of reality in the academic environment”

Psychologists agree that environment has a profound influence on mental health. Children coming from slums are more likely to suffer from the effects of parental neglect and inadequate schooling than pupils coming from ordered homes. Because of lack of care, affection and security, many students take to anti-social activities

The problems of mental health of school going children is rooted in their needs. Children are positively influenced by teachers who are cooperative with a democratic attitude; show concern for them, listen to their problems; exhibit sense of humour; appreciate their works;

and have consideration towards their needs. Therefore it is very important that during the school years the children should be under the guidance and supervision of teachers with a balanced temperament. Teachers should establish proper rapport with their students because one's mental health is always enriched by improvement of one's relationship with others. Teachers should behave in such a way that students should feel that their teachers care for them. Proper self concepts and self-confidence should be developed among school goers. Conditions in schools should satisfy their fundamental, emotional and social needs. The humanistic approach should be ensured in the classroom. The school situation should promote the need for security, and for a feeling of personal worth.

Through mental health classes, schools can develop normal social attitudes and give training in social skills for better adjustment in society. The personality and behaviour of teachers are important in this.

Mental health is not just freedom from mental illness. It is a positive quality of an individual's daily living.

Effectiveness of Mid-Day Meals Programme : An Evaluative Study

GOBINDA CHANDRA PAL

Post Doctoral Fellow

Tata Institute of Fundamental Research, Bombay

This study examines the effect of mid-day meals programme on the enrolment, attendance and retention of children at primary school level. Data were collected from the school registers for the 5 years (1984-89). A total of 40 rural primary schools (20 schools having mid-day meals programme and 20 schools having no mid-day meals programme) were selected. Using a post-hoc research design, data were analysed. The pattern of enrolment, attendance and retention over 5 years were analysed using percentage and simple statistic of mean for the children of Scheduled Caste and Scheduled Tribe together, general category, boys, girls and total children. It was found out that mid-day meals programme has positive effect on the enrolment, attendance and retention of children at primary school level. It has greater effect on the enrolment, attendance and retention of SC and ST children and girls than general children and boys.

The Constitutional commitment to the provision of free and compulsory education at the elementary education stage has been leading to various steps in the expansion of educational facilities. Mention may be made of the introduction of a number of incentive schemes like mid-day meals, free uniform, attendance scholarship, etc. In spite of the implementation of these schemes, a large number of children still do not attend schools. Some of the children join schools at the initial stage but drop-out even without completing first five years of schooling. This has been attributed to the poverty of the rural masses, as basic factor. In the formal system of schooling the students are required to remain in schools for several hours each day to participate in the academic programmes as also in the co-curricular activities. It may, in some cases, not be

possible for under-nourished or mal-nourished children to bear the strain of daily school routine of 5 to 6 hours. Poor health and low nutritional status do not allow children to remain in the schools for long hours and may even compel them to miss the classes frequently. In order to meet the nutritional requirements and encourage the daily attendance, various kinds of feeding programmes have been introduced in rural primary schools as well as to other valuable groups of children.

Of course, along with mid-day meals, other incentive programmes like free books, uniforms, scholarship etc. are also provided for the ancillary requirements of schooling, generally to children belonging to the weaker sections and females; these schemes continue to meet the requirements of such children generally upto high

school and in some cases upto the degree level. According to Fifth All India Educational Survey (1986), the percentage of schools covered under mid-day meals was 27.73, under free uniform 46.80 and free text-books 59.09. The objective behind the implementation of these incentive schemes, particularly in rural primary schools, was that these would operate as a catalyst to influence the decision of the parents belonging to the weaker sections of the population to send their children to school. Among others, mid-day meals programme is looked upon as having the potentiality of motivating school children to attend schools regularly as it provides them some kind of food regularly. For these reasons, mid-day meals programme is considered to be a valuable input in the development of elementary education. As such, it has been made a priority programme among various incentive schemes in the Five-Year Plans and has been the main scheme in operation in almost all the states. The scheme has been in operation for about two and half decades, however, its impact on the process of educational development at the elementary stage in rural areas has not been systematically assessed.

While assessing the impact of mid-day meals, various studies have focused on either nutritive aspects or socio-economic status of beneficiaries and some others on students's attendance and academic achievement. Roy and Krishnamurthy (1969) studied on health and nutrition aspects of children as well as consequent impact on academic achievement and attendance. They found that mid-day meals programme reduces dropout rates and increases attendance at the lower age levels, particularly among weaker sections. Gopalan (1985) studied the operation of mid-day meals from the point of view of health and nutrition and suggested that the scheme can act as trigger for the whole process of development if properly managed.

Nagarajan et. al (1983) did a sample study in 12 rural feeding centres including 6 primary

schools. From their longitudinal study, they observed that enrolment of pre-school children (2-5 age group) significantly increased, but for 5-10 age group, there was no significant upward swing in the total enrolment except for SCs and STs. They concluded that there was "a near close cent percent attendance".

A national study entitled "Impact of Mid-day Meals Programme on Enrolment and Retention at the Primary Stage" was conducted by NCERT (1984). The study was based on enrolment and other data available in the Third All India Educational Survey (1978). All the 13 states where mid-day meal programme was in operation in 1978, were studied. The study was done by dividing all the states into clusters by taking into account the state policy on mid-day meal programme, variations in relevant data availability and the level of socio-economic and educational development in the states. According to this study, enrolment rate for districts with mid-day meals at both points of time (1973 and 1978) were higher than those without mid-day meals programme. The analysis does not provide sufficient indication for the dependence of enrolment on the percentage of beneficiaries. No positive impact of mid-day meals on retention rate had been found. However, the analysis showed that the indications of impact of mid-day meals programme on retention of girls were strong, but this difference ceased to exist when adjusted for the influence of other factors. Analysis of data also did not provide any significant evidence for the impact of mid-day meals programme on enrolment rate or retention rate for SC and ST children.

The report of the Comptroller and Auditor General of India for 1986-87 indicated that in Gujarat, the mid-day meals scheme had made no impact on attendance of children in primary schools. It also noted that the percentage of attendance to enrolment came down after commencement of the scheme. In contrast, Shah (1988) found that attendance in schools im-

proved, to some extent, after the introduction of mid-day meals scheme. But there were no change in the rate of dropouts. It would, thus, appear that although some studies have been made on the operation of mid-day meals programme, their coverage were not specified properly and there were no common findings.

The Present Study

Development of education system at the primary level has always been concerned with the enrolment, attendance and retention of children. The studies discussed above have not analysed the inter-link of these three together. While some studies emphasised on health and nutrition aspects some others on management, financing and some others either on enrolment or attendance or retention. Moreover, most of the studies analysed the data reported by All India Surveys. No study has attempted to study units of schools more systematically. The reason for emphasis on the study of mid-day meals programme and its impact is that it is the only incentive scheme which has been in operation and covers all the students in a given school.

Research Questions. The questions for which the study proposes to find answers are as follows :

1. Whether mid-day meal programme helped in increasing the enrolment, ensuring regular attendance and enhancing retention of children to complete the elementary education ?
2. To what extent mid-day meal programme facilitates the enrolment, attendance and retention of SC/ST and general category children, and boys and girls?

Objectives : The specific objectives of the study are as follows :

1. To compare the pattern of enrolment, attendance and retention of children between mid-day meals school (MDMS) and Non-mid-day meals school (NMDMS).

2. To find out the pattern of enrolment, attendance and retention for SC/ST and general category children.
3. To find out the pattern of enrolment, attendance and retention for boys and girls.

Methodology

Sample : For the purpose of the study rural schools of one state i.e. Uttar Pradesh were selected. A total of 40 schools (20 mid-day meals and 20 non-mid-day meals schools) were selected from 6 blocks of three districts. The selections of blocks and schools were made taking into consideration the objectives of the study and other factors such as demographic characteristics, school type, location of schools etc. These were finalised in consultation with the district and block authorities.

Design : A post-hoc research design was used

About Data : Data were collected from school registers by using data schedules. Three kinds of data were collected from the school registers for the period of 5 years (1984-85 to 1988-89), i.e. during the Seventh Five Year Plan period. They are -

1. **Enrolment** : Class-wise (classes 1 to V) boys, girls, SC/ST and general category students.
2. **Attendance** : Average attendance on a working day of the second week of September for each year was taken as reference point. This month was selected assuming that attendance gets stabilised by this time of the year.
3. **Retention** : Attendance on the day of compulsory papers in the annual examination of each year.
4. **Analysis of Data** : Analysis of data was done by using simple statistical techniques such as mean and percentage

Results And Discussion

As discussed, mid-day meals programme was introduced in primary schools with a view to attracting children to schools not only for increasing enrolment but also for regular attendance and completion of formal education. In order to assess whether performance in terms of increase in enrolment, attendance and retention, data collected from school records were analysed separately for mid-day meals school (MDMS) and non-mid-day meals school (NMDMS) and a comparison was made between them. Results have been analysed in respect of enrolment, attendance and retention. The findings are discussed below:

Enrolment

A look at the result given in the table 1 & 2 revealed that enrolment over 5 years (1984-85 to 1988-89) has increased to 7.06% in NDM school whereas it has decreased (-16.50%) in non-MDM school. While the enrolment of SC/ST children increased to 20.83% in MDM school, it decreased to 19.56% in non-MDM school. There was little (-0.26%) change in the enrolment of general category children in NDM school over 5 years but decreased (-15.60%) in non-MDM school.

The trend of increasing enrolment in MDM school and decreasing enrolment in non-MDM school were also found for both boys and girls. The increase in enrolment for girls in MDM school was higher (27.63%) than boys (0.40%). But in non-MDM school the enrolment of boys and girls decreased more or less upto an equal extent. In MDM school, the increase in strength of SC/ST girls over 5 years was remarkably higher (56.52%) in comparison to general category girls and SC/ST boys (19.10% and 20.03% respectively). While about 16% decrease in enrolment of boys and girls belonging to general category were there over 5 years in non-MDM school, there was no difference in enrolment of boys and girls in this category. However there was difference in enrolment between boys and girls of SC/ST (21.78% and 15.98% respectively). Thus, it appeared that mid-day meal has definite positive effect on the enrolment of the children, especially SC/ST and girls at primary school level.

Attendance

The percentages of attendance to enrolment was found similar in MDM and non-MDM schools. There was no substantial difference between children of SC/ST and general category.

TABLE I
Percentage Variation in Enrolment in MDM
School by Caste and Gender

Year	SC/ST			Others			Total		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1984-85	—	—	—	—	—	—	—	—	—
1985-86	+6.04	+8.15	+6.55	+5.5	+17.98	+5.34	+1.98	+15.74	+5.65
1986-87	-4.40	+6.53	-1.72	-1.94	-3.26	-2.35	-2.61	-1.18	-2.19
1987-88	+16.52	+33.02	+20.90	-6.91	-9.99	-7.85	-0.68	-0.11	-0.51
1988-89	+16.52	+2.13	+1.76	+0.66	+15.94	+5.21	+9.96	+11.71	+4.14
Over 5 years (1984-89)	+20.03	+56.52	+28.83	-7.61	+19.10	-0.26	+0.40	+27.63	+7.06

TABLE 2

**Percentage Variation in Enrolment in Non-MDM
School by Caste and Gender**

Years	SC/ST			Others			Total		
	Boy	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1984-85	—	—	—	—	—	—	—	—	—
1985-86	-17.34	-8.33	-15.14	-3.04	1.53	-1.70	-6.46	-4.41	-4.75
1986-87	-0.82	-2.37	-1.20	-1.31	-9.75	-3.87	-1.22	+5.36	+0.73
1987-88	+14.28	-4.65	+9.33	-8.95	-19.55	-11.96	-4.02	-27.55	-11.28
1988-89	-15.38	-1.63	-12.25	-3.08	+14.35	-10.69	-5.10	+10.81	-1.91
Over 5 years (1984-89)	-21.78	-15.98	-19.56	-15.56	-15.70	-15.60	-16.79	-15.75	-16.50

TABLE 3

**Percentage of Attendance to Enrolment in MDM
School by Caste and Gender**

Year	SC/ST			Others			Total		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1984-85	83.25	84.78	83.62	91.66	84.75	89.76	89.47	84.76	88.21
1985-86	52.93	75.88	58.55	82.20	68.70	78.05	74.27	70.23	73.09
1986-87	86.03	87.74	86.48	86.48	81.29	84.90	86.36	82.77	85.30
1987-88	77.78	88.65	80.95	87.20	95.00	89.53	84.26	93.06	86.36
1988-89	87.48	86.11	87.08	88.08	88.68	86.36	87.89	83.89	86.58
Over 5 years (1984-89)	77.62	85.06	79.63	87.10	83.36	85.97	84.40	82.90	83.96

TABLE 4

**Percentage of Attendance to Enrolment in Non-MDM
School by Caste and Gender**

Year	SC/ST			Others			Total		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1984-85	80.86	81.94	81.12	85.64	80.72	84.20	84.50	80.96	83.50
1985-86	85.83	75.76	83.17	81.33	75.29	79.50	82.28	75.38	80.24
1986-87	78.85	74.42	77.69	89.65	86.03	88.62	87.36	83.78	86.36
1987-88	76.68	83.74	76.44	86.04	89.35	86.90	83.68	88.11	84.79
1988-89	91.19	95.04	92.18	85.76	87.45	86.25	87.00	88.94	87.55
Over 5 years (1984-89)	82.40	81.97	81.91	85.66	83.25	84.97	84.92	82.99	84.38

and boys and girls in the attendance pattern in MDM school and non-MDM school. When a comparison was made between boys and girls across caste, it was seen that SC/ST girls had higher attendance in MDM school than non-MDM school. In contrast SC/ST boys had lower attendance in MDM school in comparison to non-MDM school. A similar pattern of overall attendance in MDM and non-MDM schools may

be due to the fact that there is more fluctuation in attendance of MDM schools over the 5 years, which might have resulted due to irregularities in the supply of feeding materials. Moreover, a higher enrolment but a comparable attendance in case of MDM school might be a cause due to dislike of the students towards same kind of feeding materials for a long time. Though, they get enrolled being motivated by mid-day meals,

TABLE 5

Percentage of Attendance in Annual Examination to Enrolment in MDM school by Caste and Gender

Year	SC/ST			Others			Total		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1984-85	90.33	81.52	88.20	85.88	93.74	88.04	87.04	90.95	88.08
1985-86	87.78	77.39	85.24	86.80	68.03	81.02	87.07	70.02	82.09
1986-87	95.57	91.04	94.37	89.20	95.07	90.99	90.89	94.15	91.85
1987-88	91.67	91.13	91.51	91.71	100.00	94.18	91.70	97.29	93.35
1988-89	90.50	93.40	91.35	86.43	85.85	84.37	86.35	83.89	86.46
Over 5 years (1984-89)	91.14	87.81	90.24	87.96	88.00	87.97	88.86	87.01	88.32

TABLE 6

Percentage of Attendance to Enrolment in Non-MDM School by Caste and Gender

Year	SC/ST			Others			Total		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1984-85	77.25	77.08	77.21	82.53	72.70	79.65	81.27	73.56	79.09
1985-86	93.46	76.51	89.58	86.43	78.49	84.03	88.09	78.13	85.15
1986-87	84.06	79.84	82.96	84.33	80.63	83.28	84.27	80.48	83.21
1987-88	85.10	86.99	85.53	90.66	84.95	89.18	89.26	85.40	88.29
1988-89	64.20	85.95	69.77	87.10	80.16	85.07	81.89	81.30	81.72
Over 5 years (1984-89)	81.06	81.05	81.06	86.08	79.00	84.05	84.93	79.41	83.38

TABLE 7

**Percentage of Attendance in Annual Examination to Daily
Attendance in MDM School by Caste and Gender**

Year	SC/ST			Others			Total		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1984-85	108.51	96.15	105.49	93.69	110.60	98.08	97.28	107.30	99.85
1985-86	165.85	101.99	145.59	105.60	99.01	103.81	117.23	99.70	112.31
1986-87	111.09	103.76	109.12	103.14	116.95	107.17	105.25	113.74	107.68
1987-88	117.86	102.8	113.04	105.17	105.26	105.20	108.83	104.54	107.47
1988-89	103.45	108.47	104.91	98.13	96.80	97.69	98.25	100.00	99.86
Over 5 years (1984-89)	117.41	103.23	113.33	100.98	105.56	102.33	105.28	104.96	105.19

TABLE 8

**Percentage of Attendance in Annual Examination to
Daily Attendance in Non-MDM School by Caste and Gender**

Year	SC/ST			Others			Total		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1984-85	95.54	94.07	95.18	96.37	90.06	94.60	96.18	90.86	94.72
1985-86	109.84	101.00	107.71	106.28	104.24	105.69	107.06	103.65	106.12
1986-87	106.62	107.29	106.79	94.06	93.72	93.97	96.47	96.06	96.36
1987-88	110.97	103.88	111.89	105.38	95.07	102.63	106.67	96.39	104.12
1988-89	74.40	90.43	75.69	101.56	91.67	98.63	94.13	91.40	93.34
Over 5 years (1984-89)	98.38	98.87	98.96	100.48	94.91	98.91	100.00	95.68	98.82

they perhaps withdraw themselves as marginal utility goes down. In non-mid-day meal school, the attendance pattern remains more or less similar, over the years or over the session, because it is not instrumental to any kind of extraneous stimuli. However, as it is evident, mid-day meal facilitates the attendance of SC/ST children especially girls

Retention

In order to find out the impact of MDM programme on retention, data were analysed

from two counts - (i) percentage of attendance in annual examination to total enrolment and, (ii) percentage of attendance in annual examination to daily attendance. Table 5 and 6 present percentage of attendance in annual examination to total enrolment of the MDM and non-MDM school

It is revealed that overall percentage of attendance in annual examination to total enrolment is higher in schools with MDM programme than in schools having no MDM programme. (88.32% and 83.38% respectively) Similar trends are

found for the children of two different castes and boys and girls. It is noted that the difference between MDM school and non-MDM school on the percentage of attendance in annual examination to total enrolment was higher for girls than boys. Similarly, the gap was found wider for SC/ST than general category children.

Table 7 and 8 present percentage of attendance in annual examination to daily attendance. These show how far the MDM and non-MDM schools differ in respect of retaining the students till the end of the session once they begin to attend classes. It is seen that percentage of attendance in annual examination to daily attendance is over 100% in MDM school. But there was no increment in the strength of children who attend classes daily and also appear in annual examination in non-MDM school rather there is a slight decrease in percent. It appears that those who

attend MDM school regularly remained till the end of the session with some more attending the examination also. A similar picture emerges for SC/ST, general category children, boys and girls of MDM school and non-MDM school.

Conclusion

From the findings it can be concluded that performance of schools with MDM programme in respect of increasing enrolment, regularity in attendance and retention has been, on the whole, better in comparison to non-MDM schools. Mid-day meals programme has a better implication on the education of girls belonging to scheduled caste and scheduled tribes. This should be a matter of serious concern for the educational administrators and planners. Further researches on the factors associated with the unclear picture of attendance pattern in MDM and non-MDM schools are sought.

How Can English Language Teaching Be Made Effective ?

S P. AHLUWALIA

Director

Institute of National and Foreign Languages,

Centre for Social Science Research

Sector - 8 , Bhilai (M.P.)

It is certain that language teaching is a difficult task. But it could be made much more interesting if the teacher uses some special techniques or materials even within the classroom. Language specialists recommended this aspect for the development of language skills in the learner. The English language period should constitute a complete immersion in the English language and culture. Students must be given the feeling and the conviction that language is a functional mean of communication and not a routine exercise. The teacher should plan carefully and establish a pleasant relationship with students. The present paper suggests some techniques and interventions to make English language teaching effective, efficient and lively.

This paper makes an attempt to examine in detail some procedures generally recommended by teachers and other language specialists for developing language skills. Teachers and educators need not lose sight, however, of the fact that these procedures are evolved in a classroom setting; that the teacher guides the learning of about thirty individuals, that forces or activities within the school or the community have an impact on the classroom situation; that the use of special techniques or materials can make the development of language skills a pleasurable activity to which teachers and the learners look forward with eagerness and enthusiasm.

This paper, therefore, discusses some tangibles and intangibles that help to bring a touch of art to the well-ordered scientifically based "steps" which have concerned all teachers of English language for creating a favourable learning environment.

1. Developing a Cultural Island

Language specialists speak of the desirability of creating a "Cultural Island" in the classroom. This cultural island comes into being in several ways. To some educators, it means primarily that the foreign language is to be used at all times or at least for the greater part of the foreign lan-

guage period. They recommend that if mother tongue regional language is used at all, it be used only during the last few minutes of the period. The simple instructions needed for presenting and practising language items should be given in the English language at the beginning of the course and used at all times. The students should learn to react automatically to words such as "look", "listen", "repeat", "say" and "answer". The English language period should constitute a complete immersion in the English language and culture. There are, however, other ways of creating a cultural island in the language classroom. Some of these need a special mention:

- A visitor can be invited into the classroom to talk briefly to the students on a topic of interest to them. The teachers may ask him simple questions which they may (preferably) or may not have prepared in advance. Even if they do not understand everything the visitor says, his "native" gestures and facial expressions will convey the necessary aura of authenticity. If the visitor plays a musical instrument or teaches a simple dance, this might be more effective.
- Learners should be given their equivalent names in English language if possible. If a learner's name has no equivalent, he may select one from a list that the teacher may provide. The new names should be used from the very outset of the course in all activities.
- Recording of songs, poems, simple playlets, or dialogues in English should be played whenever possible. There are very fine recordings in the market which reproduce the sounds of foreign cities and the countryside. This can be supported by video programmes.
- At least one area of the classroom (if it is the regular classroom) or the entire classroom (if students meet the visiting foreign language specialist in a special room) should

reflect various aspects of the foreign culture. Some items (the flag and map, for example) should be permanent parts of the language corner. The corner should be labelled with a foreign language name. Other items can be changed from time to time, just as one would change displays in other centres of activity in the classroom. A colourful chart or bulletin-board may contain pictures (in colour) of the unit one teaching currently. A display case may contain dolls dressed in costumes of the country, coins, other real objects (castanets, musical instruments, sabots, or caps for example), menus, tickets and the like.

- Table in front of the display case may hold books or magazines with pictures of the cities or villages of the foreign land. Dioramas may also lend interest, as do puppets dressed in foreign costumes.

Other materials to be used with the foreign language and other curriculum areas are easily available e.g. a picture file, number flash cards, a dollhouse, miniature furniture, toy telephones, trucks, cars and others, a puppet stage, if possible toy stores, grocery, stationery, fruit, clothing, and the myriad other items which are so effectively used at the school level.

All the materials should be used to reinforce the concept stated before. Students must be given the feeling and the conviction that language is a functional means of communication and not a routine exercise. Anything that can be said in the mother tongue (or in the native tongue) can be said as well in the foreign language, specially English.

2. Establishing Relationships

Tangibles—people, books and things have been mentioned which help to create a favourable climate for learning. There are other factors or elements which are as important—some would say more important—in developing in learners the

ability to communicate in a foreign language. Some of these deserve and demand attention briefly.

1. Use the "you" approach in your teaching. Relate the various phases of the lesson to personal experiences of the pupils. Let them tell you about themselves, their parents, relatives or friends who have taken a trip or had an experience related to your lesson. Use the children's clothing or books or age or height in introducing or practising new material. Teach the "You" and "I" forms first so that they can ask and answer questions about themselves. Start teaching about the classroom and the things in it before fanning out to the school and the community.
2. Use praise generously but judiciously. Find something favourable to say when there has been some growth in a timid learner's ability to contribute individually or when there has been an improved performance. Don't say "That's good", even when the performance is poor. Rather say something such as "That's much better".
3. Give pupils a feeling of success. This can be done in several ways".
 - Provide many models before you ask for repetition
 - Ask the children to repeat in chorus before asking child to individual repeat (about, the only exception would be when a pupil gives his name or address. Even then, the first part of the sentence "My name is" can be practised in chorus a number of times.
 - Call on volunteers before you call on non-volunteers
 - Call on your more able students before calling on the others. This gives the less able students the opportunity to practise the correct form of expression silently
 - Plan the procedure so that the possibilities of a pupil's making an error are reduced. The techniques mentioned here

minimize the chance for errors, as does the technique of having the pupils ask you the questions. (The teacher may also use the technique, however, to change the pace of the lesson or to avoid monotony. After the teacher has given the correct response, he may wish to call again on the pupil whose poor recitation may have prompted him to ask for the question.

- Seat a pupil who needs help near more able students so that he will hear their correct responses.
 - Give pupils time to think of their responses. Ask a question, pause, then call on a pupil by name
 - Prompt a student if he is having trouble in starting his response
 - Tell students what they are going to be tested on. Do not give surprise tests
4. Give pupils a sense of achievement. This can be accomplished in various ways
 - Encourage pupils to ask questions of other classmates and of the teacher.
 - Encourage them to act as group leaders
 - Ask pupils to act as the teacher. Even the less able ones can point to pictures or turn the hands of the clock.
 - Individualize the instruction. Gear the question or the assignments to the abilities of the learners.
 - Leave a drill as soon as most of the pupils say it reasonably well. Go on to something new, to a variation of the drill or to a recombination drill.
 - Combine the separate skills into real communication situations. Have the students come to the front of the room to dramatize a conversation, give them roles in plays, and set up buying, visiting, learning experiences where the separate language items are integrated
 - Build new language patterns on language they already know. Give them insight into the building blocks that go into the

language.

- Teach all the items in a unit of work, but proceed to a new unit as soon as the majority of students have attained reasonable mastery of the material in the unit. If there are still rough edges, the teacher can always introduce the material soon. Do not stay with one unit too long. Give pupils the feeling that they are moving forward.
 - If the teacher feels that he/she should not proceed to a new unit, recombine the material into new dialogues or use the material in a game, but keep achieving more fluency or more accurate pronunciation or more uses of familiar material in new situations.
5. Provide a socialized setting. If possible, arrange to have pupils sit in a semicircle.
 6. Move to various parts of the room, but make sure all the students can see the teacher at all times.
 7. Create audience situations. Help the students show off their new abilities to their classmates, other classes, and parents. When the teacher wants a child to say something or to show an item, say "Tell us" or "Show us", never "Tell me" or "Show me".
 8. After furnishing the accurate model for a sentence or expression, let the students do most of the talking. Question them and have them direct their questions to each other. Learn with them, if necessary, but remember, they are the language learners.
 9. Use the special talents of the students or their parents. Many have musical or artistic skills which can contribute to the pleasure of learning.

10. Maintain a brisk tempo in the classroom. Drills should be accurate but fast; language teaching should not be slowed down; hand signals for change of group or for change of type of participation should be used. It is necessary to say "The whole class repeat", for example. An encircling gesture of the arms can mean that. Decide on some signals you can use to elicit repetition or response and practise them several times with the class.

3. Planning for Learning

Teachers who have had little or no experience or training in teaching English language will find it desirable to plan their work carefully so that every lesson will relate back to something that has been taught and will lead to the use of an item skill in a broader, more integrated language activity. Every lesson should occupy a logical place in a well-conceived overall plan.

The two kinds of plans the teachers usually have to make are : the unit plan, and the daily lesson plan. All plans should be detailed enough to keep constantly before one not only the outcomes he/she hopes to achieve but also the drills activities, and instructional materials that can help achieve them. The fuller and more specific the plan is, the more helpful it will be for making English language teaching effective.

If the English language teachers accept and implement, initiate and introduce sensibly and judiciously, the techniques, strategies and interventions mentioned in the foregoing paras they can make English language learning interesting and imaginative, effective and efficient, lively and realistic. The success and future of ELT depends on dynamic and alert teachers as well as disciplined and motivated learners.

Work Experience — Some Useful Teaching Strategies

BIMAL CHARAN SWAIN

RAJALAKSHMI DAS

Department of Education, J N. Government College,
Pasighat (Arunachal Pradesh)

The present article is confined to the provision of pre-service training and in-service training for teachers providing instruction in Socially Useful Productive Work (SUPW) activities in different States and Union Territories in India. The article also provides guidelines for better preparation of teachers imparting instruction in SUPW activities.

The Ishwar Bhai Patel Review Committee (1977) which was appointed to examine the curriculum for the ten-years school, preferred the term "Socially Useful Productive Work" (SUPW) to Work Experience (WE) and recommended that SUPW be an integral part of school curriculum. In the light of the recommendations of the Committee, SUPW was introduced at the school level in different states and union territories in India.

Socially useful productive work has been defined as purposive, meaningful, manual, work resulting in either goods or services which are useful to the community. This definition emphasises that education should be work-centred. SUPW comprise work consisting of service, production and community development activities in various areas of human needs such as health and hygiene, food, clothing, shelter, culture and recreation and social service in accordance with mental and manual abilities of the children at various stages of school education and the availability of local

resources.

This provision of properly skilled teachers for the successful implementation of SUPW programme is very important. In order to give SUPW a proper place in the school curriculum, it is recommended by the Review Committee (1977) that :

- There should be provision for a part-time socially useful productive personnel for organising different activities.
- The professional status of teachers of socially useful productive work should be same as that of other teachers.
- There should be cells for socially useful productive work in the State Departments of Education and the State institutions of education to develop programmes of in-service training.
- A scheme of course content of SUPW for teacher training colleges should be produced by NCERT in collaboration with such other institutes which have included manual labour in their regular programmes.

At present, in majority of states and union territories in India, no teachers are specifically appointed to provide instruction in SUPW activities. In some states and union territories, SUPW classes are generally entrusted to craft/work experience teachers and general subject teachers. In Uttar Pradesh, Punjab, Kerala and Delhi the instruction in SUPW/WE activities is imparted by specialized teachers (craft/WE) besides, the general subject teachers. However in Rajasthan, Haryana, Maharashtra and Orissa, SUPW/WE instruction is imparted by craft and general subject teachers.

Reorientation of teacher education curriculum is crucial to the successful implementation of SUPW programme. National Council of Teacher Education (NCTE) has recommended incorporation of SUPW/WE as one of the subjects in the teacher training programme. NCTE has prepared two documents entitled "Teacher Education Curriculum—A Frame Work" and 'One Step Forward. SUPW and Community Work in Teacher Education' in 1978 and 1980 respectively. NCERT (1991) has prepared a document entitled "Elementary Teacher Education Curriculum—Guidelines and Syllabi. In this document work experience has been included as one of the subjects in elementary teacher education curriculum.

Pre-Service Training for SUPW

Pre-service training of teachers for SUPW/WE is provided by the teacher education/training institutions in different states and union territories. Preparation of teachers for SUPW/WE is also undertaken at the Basic Training Colleges and similar institutions run by different states and union territories. The Regional Colleges of Education also provide courses consisting of two hours of theory and practical each per week in the specialized work related area. The Regional College of Education, Bhopal had started one year B Ed course in Work Experience a few years back but it did not continue after two years.

In-Service Training

In some states and union territories, State Institutes of Education (SIEs) conduct in-service training programme for teachers. Under such programmes instructions for organising activities in SUPW/WE are provided for learning teacher. Thus the teachers are equipped with methodology and acquire necessary skills. The NCERT is assisting the states by training key personnel on SUPW who in turn will train the teachers in their respective fields. The States like Andhra Pradesh, Gujarat, Haryana, Karnataka, Meghalaya, Nagaland and Rajasthan have trained large number of teachers with collaboration of the NCERT a few years ago. The National Council for Teacher Education (NCTE) prepares model curricula for the in-service teacher training for the guidance of Board of Studies of the Universities. The NCERT, SCERTs/SIEs and other teachers' training colleges conduct training programmes of different duration for in-service teacher training.

An overview of the teacher training in SUPW/WE in some states and union territories is given below:

Short duration orientation courses are conducted for craft teachers and primary school teachers in Andaman and Nicobar islands. The State of Andhra Pradesh has identified eight colleges of education for training teachers for SUPW. State Institute of Education, Kerala organises training for teachers providing instruction in SUPW activities.

Board of Secondary Education, Orissa has completed orientation programmes in agriculture, horticulture, fruit preservation, canning, bee-keeping, soil conservation, sericulture, poultry and community work.

The Lok Bharati at Sanosara, the Gujarat Vidyapeeth at Ahmedabad and Gandhi Vidyapeeth of Vadod have been preparing teachers for SUPW for last few years. In Uttar Pradesh, 10-day orientation courses are organised

in different activities in five professional institutes of the State. However, no special training programme has been initiated by Delhi and Arunachal Pradesh, Skill training pertaining to SUPW/WE activities is not provided in Assam. In West Bengal and Rajasthan the Boards and Directorates of Education conduct training programmes on SUPW/Work Experience. In Jammu and Kashmir, District Institutes of Education and Training conduct training programmes on socially useful productive work, work experience. All India Women's Conference conducted two week training programmes in Bihar for teachers imparting instruction in SUPW/WE activities a few years back. It is worth to mention that in Karnataka, Central Food Technology and Research Institute conduct 10-day orientation programme for skill training in SUPW.

Suggestions

In order to develop the desired skill orientation, it is suggested that the Directorate of Education of the concerned state may plan to appoint at least one or two teachers with technical/professional back-ground in each school to coordinate the SUPW programme and by and large all teachers may be involved in the programme. Involvement of vocational teachers, wherever available may be helpful. In case, where trained craftsmen/professional experts are obtainable within the locality, effort needs to be made to involve them in imparting training in the school. The teachers imparting instruction in SUPW/WE activities be given the same status and salary

benefits as other subjects teachers.

SUPW/WE should be an integral component of pre-service and in-service teacher education programme. The teacher education programme may be revised on the basis of recommendations of the NCERT. Special orientation programmes of short duration may be conducted at least once in six months for craft and general subject teachers at block, district, state and national level by the State and Central Government for qualitative improvement of the teachers. At the state level, apart from the Directorate of Education, SCERT and SIE may take the responsibility of rendering training. SUPW cell may be set up by the state governments in SCERT for organisation of such training. The bodies which may initiate training at the centre would consist of NIEPA, NCERT, Joint Council of Vocational Training in consultation with the Ministry of Human Resource Development. Topics relating to SUPW activities in which teachers face difficulties may be broadcast by All India Radio or Television. Workshop and seminars etc. may also be organised by the state and Central Government from time to time to reorient the teachers about the emerging trends in the fields of SUPW/WE.

SCERT, SIE and voluntary organisations of the state may take step to produce literature on SUPW in terms of source books, guide books, doing-learning units, unit plans, resource units and manuals etc. on different work activities which may be helpful to teachers.

Developing Reading Habit in Children

HEMANTA KHANDAI

ANSHUMAN DAS

PRAVAKAR MALLICK

Institute of Education

Devi Ahilya Viswa Vidyalaya, Indore

A child may understand what he is reading. But he can take the full pleasure of reading a book once he enjoys reading. One has to learn how to vary his reading with the purpose at hand. This is a creative art also. There should be a balance between imaginative and literal reading. It is not only the teacher and the school where the child learns how to read and acquire the skills of reading but home, family and community also play a very significant role in developing this reading habit in the children. Here authors have highlighted the different roles played by the family, the teacher and the community at large, and have included some specific suggestions. Young children are important asset of a nation. If they are given the necessary skill for developing reading habit we will move towards a reading society.

We enjoy doing the things we do well. A good football player enjoys outwitting the opposition as the ball moves toward the goal. A graceful dancer enjoys the movement, rhythm and music, and is likely to seek additional opportunities to dance. And so it is with many adults and children. We like to do what we do well.

Reading is no exception; good adult readers are more likely to reach for a newspaper or a book than a person who must stumble along pronouncing each word, and often losing the meaning of what is read.

A child who is a slow, halting reader avoids reading even the most beautifully illustrated storybook. He may try to understand the gist of the story from the pictures, for he understands

that there is meaning in a book. His attempt is commendable, but his enjoyment is limited. And it certainly does not foretell the development of a reading habit.

Many people believe that the thirst towards reading takes place in a school, and that the teacher has the primary responsibility in guiding these steps. This is not entirely true, for before the child starts going to the school he/she has experienced several years of life, and has dealt with words and ideas long before the first day of school.

There are many others who share the responsibility for planting the seeds of reading habit among children. All of them will profit from the knowledge that humans enjoy doing what they do well.

What is a Reader?

Just as there are many kinds of reading materials, there are many ways to read. Although some may believe that the act of reading is always identical, this is only true when an individual has not learned, consciously or unconsciously, to vary his reading with the purpose at hand. Reading a recipe is different from reading an item in the newspaper.

Someone who thinks that there is only one kind of reading is likely to be a person who reads only one kind of material. Thus a child whose only reading experience is with narrative stories may not know how to enjoy reading poetry. Following specific written directions can also be an ordeal for someone who is not prepared to read directions properly.

For most children stories are most enjoyable kind of reading. Even with stories, however, different reading approaches are the norm. Some children may race through a story to find out what happens. Others may go beyond the plot. They add meaning (usually based on their own experiences) and use reading as a launching pad for imaginative thinking and acting. They are not bound by the words of the story.

Such children may become through their creativity, an asset to the artistic world. They may create because it is within them to create.

Every student should be given the opportunity and be encouraged to create some will be more successful than others. Their early attempts to write should be encouraged, for a writer is likely to become a reader. Adult should remember that spelling words correctly is an acquired skill. It is not necessary for a child's stories or any writing to spell correctly according to dictionary standards, even though it may distress the adult reader. In most cases, when correct spelling is needed, it can be supplied.

Ideally, a child combines imaginative and literal reading. A balance of the two serves the whole person, as well as the society. There are

many variations beyond these two kinds of readers. All of them, however, require that materials be available. This should be our main task.

Who Shares the Responsibility?

Even before a child starts going to school, he/she gathers rich school experiences within the family circle which leads to reading. It is then that supply of reading materials becomes critical. In addition to the family and friends, libraries, publishers and bookstores help to provide books which help to nurture the habit of reading. The electronic media play an important role too, for film, radio and television help build the world of ideas which a reader needs.

Family

Mother, father, brother, sister, uncles, aunts and grand parents, not to mention friends of the family, provide the most important early experiences that help to build concepts and attitudes which create a successful reader. The disposition of the family toward ideas, towards books and reading sets up important values which may stir even the youngest baby.

Parental influences are great in helping their children become readers. In fact, they are probably the most important.

Before Child Learns to Read

Most parents do not realize that they can help accomplish this ambition almost from a baby's first day. It is never too early to expose a child to experiences which will be useful in school and in life.

Parents who read, themselves, are likely to have children who read. A role model is a powerful but subtle motivation for a child to use reading "like mother and daddy do". But active teaching of basic concepts, ideas and attitudes is also the responsibility of a parent.

Learning to differentiate between colours, to recognize them and to name them may seem

rudimentary, but it is an important building block, as are many other concepts and experiences about which a child will be expected to know. Such knowledge will help the child eventually learn to read.

Words and language, of course, are what the child will eventually read; expose the child to language — just talking to the baby — and gradual exposure to language which has meaning for the child are important. As children grow, they usually enjoy word play and word games which help them show their mastery over words. Parents and the entire family can join in the fun of playing games with words.

Reading aloud to young child is also, as previously suggested, a means of signifying that the parents value reading. Most children also enjoy the comfort of hearing the same familiar stories over and over. Sometimes they gleefully finish sentences. This does not mean that it is no longer necessary to read that story. In fact, it indicates that the child is showing appreciation and that learning from the story has taken place.

Interests and attention spans of children vary; some maintain regard for what is read, even if the story is from adult materials which the parents enjoy, and would like to share. When it becomes obvious that the child is no longer paying attention, it is time to shift to books which more closely adhere to the child's level of interest. The parent's obvious interest, enjoyment is eloquent, however, whether the materials are easy or difficult.

After Child Reads Himself

There are examples of parents who continue to read to them even after the children have learned to read. Parents who discuss what they have read and invite their children's contributions to the conversation are directly influencing their children to develop reading habit. Parents who enjoy literature present good role models for future readers.

Parents must remember that each child is

different, and that one may be more mature and forthcoming than another. Involving everyone in family conversation is a delicate but rewarding activity.

Television and radio can often be useful instruments for discussing plots, language usage, and for evaluating the worth of a specific programme collectively. Mass media programmes can often lead to reading more about a topic or a subject. Here the guidance of a librarian who knows how to locate the appropriate book is specially useful.

If television viewing has become a problem, with children spending an inordinate amount of time mindlessly watching the set, it is sometimes necessary to limit the amount of viewing time, and also to help children decide which programmes they will watch. We must remember that television is a source of learning many things, it should be used with cooperative judgement.

Setting aside a time for family reading — an hour during which parents and children read something of interest to them — is especially useful in families which discuss their reading as a matter of course. If the reading hour is perceived as a form of punishment, it can back-fire.

Parents Should Avoid:

(1) Closing doors to books and ideas through unwitting ridicule, verbal or subconscious. "What, nose in a book again!" even if said in jest, can quench a child's interest quickly.

(2) Making discussion about books and ideas a testing situation, with penalties for answers which do not agree with a parent's perceptions of the subject.

(3) Forcing a child to read a book without previous discussion about it. When reading a voluntary activity, it is much more likely to be relished and continued for life.

Schools

It is obvious that schools are responsible for

sharpening the reading abilities of young people. Yet they cannot be expected to perform the entire task of shaping perceptual skills, providing experiences and motivating each child for a lifetime of reading. Schools should do every thing they can to create literate members of society, but others also have responsibility for this awesome task.

Whenever possible, reading should be a positive experience—challenging but pleasurable. Teachers can do much to create an atmosphere in which learning will not be an avoidable memory. We have heard of extreme cases in which a sharp-tongued teacher has ridiculed a poor reader and soon the other pupils join in. This is inexcusable. It may teach the victim to avoid reading for life.

As with parents, a teacher who reads to the class from the books which the teacher enjoyed (which may be above the reading level of the class) plants seeds for future adult reading. Not only is an example being set, but the teacher's enthusiasm may be catching, and the students' curiosity aroused. Poetry particularly lends itself to oral reading. It is usually not lengthy, easy to prepare, and when properly read can create enthusiasm for reading similar works aloud by the children. How can a teacher, or a parent helping a child, be certain that the materials are not so difficult that they discourage the reader? This is not easy. One way is to let the reader choose the book. A child's high interest in a topic, special previous experience with the vocabulary of a selection, or skillful anticipation of the context of the material can make even difficult materials easier to deal with.

In general, a child or an adult gets more satisfaction from reading materials which do not overwhelm by their complex subject or style. A person who selects materials to be read and is comfortable with it is likely to want to read and is comfortable with it is likely to want to read more success.

Schools Promote Reading

Some schools have the reputation for killing the desire to read. This is always not true, but mindless procedures and activities often do more harm than good, and produce students who avoid reading. Here are a few of the many ways in which schools can help develop lifelong reading habits among children.

(1) Make certain that students know reading is an important tool, not just stories which must be read from books.

(2) Make reading more than the recognition and oral pronunciation of words.

(3) Have many books available for free reading. A school library should have books for variety of readers available to all.

(4) Encourage children to take books home, to discuss with their parents and grandparents, who might also read them for the first time. This promotes adult literacy, as well.

(5) Avoid, whenever possible, making reading a boring task, with many routine drill activities which deaden interest.

(6) Challenge students to think about, discuss, and even argue about what they are reading, and have read. Get them involved with ideas.

Libraries

Public and school libraries have encouraged the reading habit of many children. Where these do not exist, a generous adult book-lover may encourage diligent young people to borrow through a personal book collection. When trust has been established, books may even be borrowed from this generous source! Borrowing requires a high degree of motivation on the part of the young reader. Occasionally, several children together might make the long walk which may be required. This adds a desirable social aspect.

A friendly, attractive public or school

library can encourage the reading habit. It can also help build a nation in the long run. Money spent for books, journals and newspapers which students may consult in an open, pleasant, well-lit atmosphere is as important as a play field for educating young people. A wasted mind is a terrible loss.

Librarians who willingly recommend books and assist students in finding materials cultivate the soil of readership. They know that interesting treasures when hidden on book shelves serve little purpose. Guidance to these treasures is invaluable to the young reader.

Publishers and Booksellers

The cost of books is high. Keeping costs down and quality high is one of the constant responsibilities of a good publisher. Paper cost alone are prohibitive in many places, printing and binding are equally costly. Authors and illustrators must be rewarded for their important contributions, as must editors. And some books do not sell enough copies to cover their high costs. Governments often assist, and should, for the nation profits from a reading public.

In many places, distribution is an enormous impediment. Even if a buyer knows what is wanted, obtaining the copy is delayed by shipping difficulties, legal problems and financial obstacles along the distribution line. Where good distribution is most needed, it is often lacking in developed as well as developing countries. But in developing countries this is disastrous, for the need is greatest. Government should remove obstacles to book distribution as policy for the public good.

Where good book stores exist, they can be of great help in creating good readers. Some specialize in children's books; others have a comfortable area where children can conveniently borrow and decide to buy books, while their parents do the same. Friendly service and good stock are the keys to success in almost any retail establishment. It is true of book stores, too. The profit

margin should not be begrudged, for profits are low.

The Media

Newspapers, journals, radio and television also share the responsibility for creating reading habit in children. The media are dependent upon the written and spoken word, and profit greatly from a literate society. Television depends upon scripts, as does radio for the most part. The written word is more obvious in the world of newspapers and journals.

Editors and producers, by acting positively to promote reading and writing, will help in the long run not only themselves but also the community at large.

Toward a Reading Society

In 1982, a World Congress on Books and Reading was organized by UNESCO in London. Adopted was an observation which stated that "books are pre-eminent as vehicles for information, culture and recreation, serving national development and the enrichment of human life, as well as fostering better understanding between peoples of various cultures".

The Congress also recommended:

- That governments and leaders recognize the role of school and public libraries in making books available;
- Increased production and distribution of good quality school manuals and textbooks, remain one of the least expensive ways of educating children;
- That the vigorous efforts to promote readership by encouraging the writing, production and distribution of children's books, especially in national languages, be continued, remembering in particular the importance of books outside the education system. But, it reported, increased book production can not be the sole target, but must be accompanied by vigorous efforts to promote reading among the millions of potential readers throughout the world.

— A reading society is one in which every individual can read, and where books are an integral part of daily life. Young readers are the most important assurance that a nation will become a reading society. The responsibility for creating lifetime readers is a

broad one. Family, school, libraries, publishers, bookstores and the mass media share this responsibility. In addition, every literate adult has the responsibility for showing children the values of reading and for helping them become lifetime readers.

Wastage in Primary Education among Tribal Children

G. ANANDA

Senior Project Associate

DPSSE, National Council of Educational

Research and Training, New Delhi

Throughout the whole educational system of India there is waste and ineffectiveness (Hartog Committee, 1929) and this remark also holds good even today. This absenteeism, stagnation and dropouts particularly in the lower primary grades causes an immense waste of money and efforts. The magnitude of wastage is emaciating the educational development in the country. Meticulous assessment reveals that the proportion of wastage and stagnation is much higher in case of tribal education having scarce resource at the disposal. It is therefore, pertinent to check this wastage.

India is the second largest country in the world in terms of tribal population.

TABLE 1

Literacy Rates for Scheduled Tribe Population during 1961, 1971, 1981 and 1991

Years	Male	Female	Total
1961	13.8	3.2	8.50
1971	17.6	4.9	11.25
1981	24.52	8.04	16.35
1991	40.65	18.19	29.60

Since independence efforts are being made in staggering dimensions to uplift the tribal population from illiteracy trap. The Education Commission (1964-66) also stated that "different tribal people are at varying stages of economic development". There is much difference in the skills they have attained and technologies they imply. Therefore, in pre-dominantly tribal

areas each group and the area in which it lies should be studied closely and appropriate pattern of development worked out in close cooperation with the people.

National Policy on Education (NPE-1986) while emphasizing importance of education for scheduled tribes, accorded priority to opening primary schools in tribal areas.

Considering its importance it is, therefore, very urgent to have a study on the rate of wastage and stagnation in the children of tribal population. The present study was conducted in Nallamalai forest region of Andhra Pradesh, the population of this region is mainly dominated by Chenchu tribals. The Nallamalai region of Andhra Pradesh is mainly constituted of three districts i.e., Kurnool, Mahabubnagar and Prakasham

TABLE 2
Schematic Presentation of Sampling

<i>Name of the Districts</i>	<i>Name of the Villages</i>	<i>Name of the Ashram Schools</i>
Kurnool	Anobham	Govt. Ashram School
	Kottalacheruvu	Govt. T.W. Ashram School
	Panyam	Govt. T.W. Ashram School
Mahaboobnagar	Banala	Govt. T.W. Ashram School
	Chenchugudem	-do-
	Jangam Reddy Palli	-do-
Prakasham	Marrepalem	Govt. Ashram School
	Peddammathanala	-do-
	Thummala Bailu	-do-

having very low literacy rate. The study mainly deals with the primary education in ashram school, which enjoys top priority in NPE, 1986.

The sample for the present enquiry is selected in three districts namely Kurnool, Mahaboobnagar and Prakasham. Most of the Chenchu population live in these districts. These districts are representative of three regions of Andhra Pradesh State i.e., Rayalseema, Telangana, and Coastal Andhra Pradesh respectively. In each of these districts three ashram schools have selected at random.

Methodology

1. To compute the rate of absenteeism, stagnation and dropouts informations were collected from school attendance registers
2. As interviews and discussions with teachers/ headmasters and students were conducted to know the reasons for absenteeism.
3. A first hand observation of schools was also undertaken to know about the school and its environment.

Objectives. The objectives of the investigation were-as follows :

1. To know the functioning of primary education of Chenchu tribes;
2. To find out the rate of absenteeism of Chenchu children attending primary school
3. To find out the rate of stagnation of Chenchu

- primary education system;and
4. To find out the drop-out rate of Chenchu children attending primary school

Analysis of Data

Absenteeism : The pertinent problem of Indian educational system is staggering absenteeism, this percentage of absenteeism is much higher in tribal districts than that of the non-tribal district resulting in high rate of illiteracy in these districts and also high percentage of illiteracy among tribal population. Absenteeism has been defined as the absence of student on any working day of the school. "The absence includes both authorised and unauthorised staying away from classes"

TABLE 3
Mean Absenteeism of both Boys and Girls from the Year 1985-86 to 1989-90.

<i>Classes</i>	<i>Mean Absenteeism</i>		
	<i>Total</i>	<i>Boys</i>	<i>Girls</i>
I	133.0	69.6	63.4
II	56.4	31.4	25.0
III	34.0	20.2	13.8
IV	24.6	16.4	8.2
V	15.4	10.2	5.2

The data pertaining to absenteeism has been collected from attendance registers of the sample ashram schools. The result is given in Table 3

The table clearly depicts that the absentee-

ism rate decreases in class II to V, is highest in class I and vice versa. The mean absenteeism in class I is 133.0 which is higher than the mean absenteeism of all other classes (15.4 <24.6 <34.0 <56.4, <133.0) of primary stage.

The mean absenteeism of boys reading in class I is greater than that of girls reading in class I, (69.6 > 63.4). In Class II the absenteeism of boys is greater than girls (31.4 > 25.0) and this high rate of absenteeism of boys than that of girls continues in all other higher classes i.e., class IV and V. This clearly depicts that the absenteeism rate of boys is 6 per-cent higher than the absenteeism rate of girls in almost all classes.

Stagnation The other important problem facing the education of tribal children is stagnation. Stagnation is defined as the retention in a lower class of a child for a period of more than one year (Hartog Committee, 1929). Stagnation is due to a variety of factors, the chief among which are the poor quality of teacher, indifferent teaching, defective system of examinations, lack of car-

TABLE 4
Mean Stagnation of both boys and girls from year 1985-86 to 1989-90

Class	Mean Stagnation		
	Total	Boys	Girls
I	132.0	65.6	66.4
II	24.0	15.8	8.2
III	12.2	5.6	2.0
IV	5.6	3.6	2.0

nestness on the part of students or lack of proper environment at home, paucity or non-availability of text books etc. (Chitkara, 1961). Table 4 shows the mean stagnation of boys and girls and total.

This table clearly divulges the fact that the mean stagnation of class I is more than all other classes (132.0 > 24.0 > 12.2 > 5.6). The mean stagnation rates of both boys and girls are almost similar in class I (65.6 and 66.4) and in Class III also there is a minor difference of stagnation between boys and girls (5.6 and 6.6) whereas in

Class II and Class IV the mean stagnation rate of boys is higher than the girls, for example in Class II the mean stagnation rate of boys is 15.8 which is higher than that girls i.e. 8.2. In Class IV the mean stagnation of boys is 3.6 which is greater than 2.0 the mean stagnation of girls in Class IV.

Dropout : Dropout signifies the mid-way withdrawal from educational system i.e., primary education. In other words, dropouts are those who left the school before the end of the final year of an educational cycle in which they are enrolled (UNESCO 1980). The dropout rate is closely related to the factors governing the demand for the supply of education and a lack of places in the upper grades is more likely to cause dropout than would failure at taking examination. In their quest and to meet the social demand for formal education given limited resources, ministries of education around the world have sought to eliminate educational wastages caused

TABLE 5
Mean dropout of both Boys and Girls during year 1985-86 to 1989-90

Class	Mean Dropouts		
	Total	Boys	Girls
I	49.6	21.0	28.6
II	30.8	15.0	15.8
III	29.8	19.0	10.8
IV	19.0	13.8	15.2
V	13.2	7.8	3.4

by repetition and dropout. (UNESCO 1980),

The dropout rate in the primary education of tribal children is also corroborated by the findings of the rates of absenteeism and stagnation. As indicated in table 5 the average dropout rate is higher in lower classes and vice versa.

The table shows that the average dropout is higher in lower classes and lower in higher classes. The mean dropout in class I is higher than that of Class II, Class III, Class IV and Class V respectively. (49.6 > 30.8 > 29.8 > 19.0 > 13.2).

The average dropout rate of girls reading in Class I and Class II is higher than that of the boys

reading in the same Class. In Class I the dropout rate of girls is 28.6 which is greater than boys (21.0). This is also true in case of Class IV (15.2, 13.8). In Class III and Class V the dropout rate of boys exceeds the dropout rate of girls. On the contrary, the dropout rate in Class II is almost equal in case of both boys and girls.

Further investigation showed that there are many socio-economic reasons for absenteeism, stagnation and dropouts in Chenchu children studying in Ashram schools. Some of these reasons are listed below:

Economic Causes

1. Parents cannot meet expenditure on their children's education (purchasing books, stationery, clothes etc.)
2. The need of economic participation of children in the day-to-day activities of the family leads to absenteeism, stagnation and dropout.

Educational Causes

1. School environment not encouraging.
2. Educational backwardness of community.
3. Lack of educational facilities for further education.
4. High enrolment in classes on account of which teachers cannot give adequate individual attention to the students.
5. School timings are not appropriate.
6. Lack of awareness about the gains of education on the part of community.

Social Causes

1. Backwardness of the community
2. Overwhelming feelings of the community that education cannot serve their needs.
3. Early marriages particularly these of girls and similar causes.

Personal Cause

1. Domestic circumstances like shouldering the family responsibilities as no elder member of the family is available to support the family
2. Poor health of the pupil i.e., illness of the child.
3. Poor academic achievement of the pupil
4. Age heterogeneity of pupils in the class

Conclusion

The problem of absenteeism is very serious in tribal areas, whereas one sees a large number of children on rolls, the actual attendance is very poor. The mean absenteeism in Class I is higher than the other classes. The mean absenteeism of boys studying in Class I is greater than that of girls studying in Class I (69.6 > 63.4). The most important reason for absenteeism is that the boys accompany their parents at the time of collection of minor forest produce and also during harvesting seasons. Generally the absenteeism is higher in the months of September to January during collection of minor forest produce. If once the Chenchu child leaves the school for summer holidays, he/she will return to classes after many days of reopening of school.

Stagnation is also one of the causes of educational wastage specially in Chenchu (rural tribal) areas. The data revealed by the nine sample Ashram Schools, shows that the stagnation of Class I is more than all other classes. The mean stagnation rates of girls and boys are almost similar in Class I and Class III. In Class IV the mean stagnation of boys is greater than the stagnation of girls. Stagnation is due to a variety of factors, the chief among which are many. The most important among these are irrelevant curriculum not related to tribal community, the poor quality of teachers, inadequate teaching materials and aids, lack of interest on the part of the students and parents, poverty and non-

availability of books

In the final analysis to meet the social demand for formal education with given limited resources the findings of the present study strongly

corroborates the worldwide consensus that in order to check educational wastage it is necessary to effectively control and contain run away absenteeism, stagnation and dropout

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(See Rule 8)

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Improvisation of Apparatus

SATISH KUMAR

Vice-Principal

District Institute of Education and Training

Mount Abu Sirohi (Rajasthan)

Science should be learnt through individual assignments, group projects and simple investigations. Students should be trained in the process of science rather than in the products of science. Thus, fact-oriented teaching of science needs to be replaced by acquisition of concepts and conceptual schemes through laboratory-centred learning. This would remain an asymptotic ideal unless laboratories are fully equipped and science teachers are to be convinced and competent to follow this approach.

In India, with only a meagre budget allocation on education and the rapid increase of enrolment in science stream, fully equipped laboratories appear to be a dream at the moment. Besides the lack of equipments in the laboratories, many apparatuses are reported unserviceable and shown broken in the annual laboratory reports of our schools. Considering the financial handicaps and growing demand of equipping the laboratories, we cannot afford to declare much of that is available in laboratories as useless. A need is therefore felt to make the best use of so-called waste materials.

In advanced countries improvisation of apparatus is much stressed not because of its being a source to reduce the expenditure in

equipping the laboratories but as an important instructional medium. Improvisation of apparatus leads to application or translation of a scientific idea. Ideally, students should be called on to improvise scientific equipment only when such improvisation is primarily for the transfer of an idea into an instrument with ultimate goal of gaining additional knowledge. This would constitute a method of instruction that would emphasize the creative talents of students. An improvisation of apparatus serves the following major purposes :

- Improvised apparatuses are usually prepared from inexpensive materials generally available at home as waste materials or scraps or from old stock. An improvisation provides the

opportunity of reusing the useless materials. Thus, it helps to reduce the expenditure on equipment and maintenance of laboratories

- Improvisation stimulates students to acquire certain work skills of handling instruments to exhibit their creativity and comprehension of principles involved in it.
- Involvement of students in the preparation of improvised apparatus is autocatalytic and an interesting activity for them
- Improvisation provides a proper coordination between laboratory work and theoretical instructions.

— Since improvised apparatuses are manually made, such apparatus need no or less repair from outside. Hence improvisation reduces the expenditure on repair of costly and sophisticated instruments

— Improvisation helps in popularizing the subject matter because of its availability and illustration values.

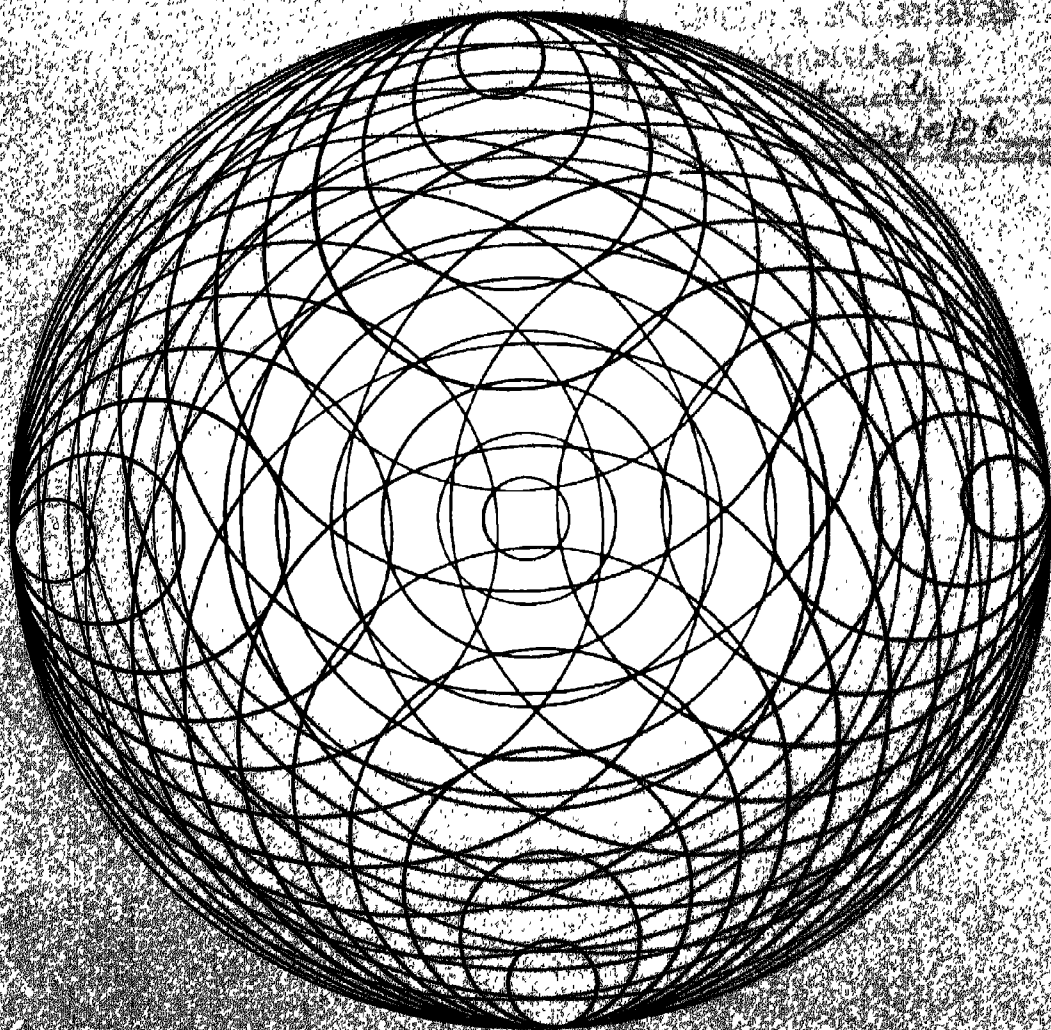
— Improvisation provides challenging activities to talented students and serves as a self motivation to weak students.

Hence improvisation of apparatus should be encouraged to make teaching-learning process lively and attractive for the students

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The major features of the Primary Teacher are .

1. Educational policies concerning primary education
2. Questions and answers
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Editorial

Educators often give a great importance to curriculum designing. To enhance and activate the achievement level of pupils and for proper planning and transaction of curriculum, effective curriculum designing is the yardstick. It makes the process of teaching-learning effective and efficient. The designing of the school curriculum should be so planned that it will help the pupils to master the content and concept of one unit successfully before leaving for the most complex ones. For this while designing the curriculum its objective, scope and depth of the content should be thought about thoroughly and a right sequence should be given to it. No doubt, it will help the learner to master one unit efficiently before going for the next unit.

It is certain that for giving a right sequencing the teacher must know the rationale of starting with what is familiar and then moving towards more complex ones. In the article entitled "Elementary Education and the Curriculum", Dr. Marlow Ediger has discussed the advantages of logical versus psychological sequence. While the advocates of logical sequence place 'the teacher' as the best person to choose for learner's attainment, the propounders of psychological sequencing emphasize that the sequence resides within the pupil alone. Besides these there should also be balance among objectives, i.e. cognitive, affective and psychomotor. The author also emphasized for an integrated curriculum designing where no subject should be taught as isolated bits. Though the author has pointed out things in an alien situation yet in our country Minimum Levels of Learning (M.L.s) and the transaction of attainment of M.L.s in diverse classroom situations need integration.

The teacher should know the individual differences in the interest of pupils and guide each to attain more optimally. For this the evaluation of achievement of pupils should be continuous so that a remediation could be followed. Talking about effective curriculum designing it comes to us as how to plan it properly in the Indian school set-up. In the article, "Teaching of Concepts Associated with the Study of the Globe and World Map," the author has suggested certain useful teaching learning activities to teach different concepts of geography which could be transacted in the classroom situation.

Human child needs a home to grow up. It is home where he/she learns the first lessons of his/her life. It is home alone which fulfils the social, religious, educational and economic needs of the child. The atmosphere at home should be conducive to the personality development of the child. In the article "Home as an Agency of Education", the author has advocated that the child should be allowed to enjoy his childhood freely to develop an

independent personality. Parental guidance should be beneficial and positive. The author also emphasized the role of 'Parents-Teachers Association'. To-day's child is tomorrow's citizen and as such to educate him properly, every care should be taken and every attention should be paid. In the research paper "Attitude of Rural Primary School Children towards ETV", researchers have found out as to how much ETV programmes of CIEE are being influencing the primary school children and how girl students are much more benefited by such programmes. It has occupied a supportive status in school education programmes.

Dr (Mrs) Basanti Banerjee in her article "Classroom Activities for Language Teaching" has come out with simple playway activities which will keep the learner involved in the task of language learning. In the paper entitled "Educational Integration for Children: A Conceptual Discussion," the researcher has discussed various ways by which integration of children with special needs could be possible with the mainstream which in turn would help them to unfold their hidden potentialities. In the games corner Shri Prabhakar Pattanaik displayed 'Multiple Khanda Pali' play which has an arithmetical value.

Elementary Education and the Curriculum

MARLOW EDIGER
Professor of Education
Northeast Missouri State
University, Kirksville

Effective curriculum designing is the cornerstone for proper planning and transaction of curriculum for enhancing the achievement level of pupils. While designing the school curriculum the teacher must first know the objective and then decide the scope and depth of the content so that a sequence of teaching-learning activities could be organised. Such sequencing will provide a framework for unit planning. This will help the learner to master the content and concept of one unit successfully before leaving the most complex ones.

The teacher has an important responsibility in carefully designing a curriculum so that each pupil may achieve more optimally. Design provides a framework for developing the unit or lesson plan for teaching-learning situations. What should go into the written design of instruction? Who should be involved in designing the curriculum? How can one know that the written design has merit and worth?

Curriculum Design

In designing the curriculum, there are selected parts that need careful consideration. One salient part in an integrated whole is the statement of *scope*. Scope pertains to the breadth of content to be taught. The scope can become narrower or broader or left as originally planned. Thus in language arts, the teacher may pinpoint the tall tale as a single unit of study. The objectives, learning opportunities, and appraisal pro-

cedures relate directly to tall tales. The scope could be broadened to include myths, legends, and fairy tales, among other forms of folklore. An important consideration here pertains to the amount of time available to teaching the entire unit of study. Another salient consideration emphasizes the number of reading materials and audio-visual aids available for teaching the unit. If time and instructional materials are more limited, perhaps a unit on tall tales would be adequate in scope. Otherwise a unit on folklore could be emphasized in the curriculum.

Once the scope of the unit has been decided upon, the question of sequence arises. Which order should be emphasized in having pupils complete the stated objectives pertaining to the unit on tall tales or in the broader unit title on folklore? The teacher must think of and implement a sequence which assists learners to attain more optimally. The objectives should be

achieved by pupils in ascending order of complexity. Each preceding objective achieved provides readiness for the succeeding goal to be attained. Learning opportunities also need to be arranged to achieve each objective so that success in learning becomes more of a reality. If the unit emphasizes tall tales in scope only, problems with sequence will need to deal with the order of objectives for pupils to achieve or the direction of learning opportunities to pursue in teaching, as well as the necessary evaluation procedures to use in appraising learner performance. Should the unit pertain to all forms of folklore, an additional problem in determining sequence stresses the order of teaching tall tales, myths, legends, and fairy tales. When making choices pertaining to the latter sequence, the teacher needs to use a rationale of starting with what is familiar and moving towards that which involves more complex content and meanings.

Logical Vs. a Psychological Sequence

When thinking of which sequence to offer to pupils, a logical or a psychological order, there are definite psychologies involved here. Behaviourism, as a psychology of learning, stresses a logical sequence or order. Thus the teacher chooses the order of objectives for pupils to attain. He/she also determines the direction of learning opportunities to follow when learners are to attain sequential objectives. What is important in a logical or psychological sequence is that each pupil learns as much as possible. Advocates of a logical sequence believe the teacher to be the best person with his/her training and experience to choose sequential objectives and learning opportunities for pupils. If there are instructional management systems of instruction (IMS) within a school district, the objectives to be emphasized have been chosen under the supervision of the central office. The teacher still must decide upon the best logical sequence to

assist pupils to attain as much as possible. If objectives of instruction are selected with the supervision of the state level of instruction, the teacher has the same task as under IMS and that is to choose which objective should be stressed first, second, third, fourth, and so on in teaching-learning situations. With national goals being in the offing such as Education 2000 (developed at the National Governors' Conference in 1989), teachers will need to order the national goals in the best sequence so that each pupil may attain as optimally as possible. With IMS, state mandated objectives, and/or national goals of instruction, the teacher sequences the objectives for learner attainment and chooses the learning opportunities so that pupils may achieve the stated objectives. The question that needs to be answered by teachers is, "Which order will guide pupils individually to achieve and attain in the best manner possible?"

Toward the other end of the continuum of the logical sequence in ordering objectives for pupil attainment is a psychological order. With a psychological sequence, the pupil is to be heavily involved in sequencing his/her own experiences. Teaching here becomes a complex act indeed. The teacher then must realize that the pupil is the focal point of instruction. The learner needs to assist, through teacher-pupil planning, which objectives to attain first, second, third, fourth, and so on. IMS, state mandated objectives, and national goals do not harmonize well with humanism as a psychology of learning. The latter approach in determining sequence stresses the district, state, or national level to select objectives for pupils to attain in the curriculum. In a logical curriculum, the teacher or others on the district, state, and national levels ascertain which objectives pupils are to attain. These objectives might even be ordered by the district, state, or national levels of organization. Generally, the teacher will have access to district state, or

national objectives and then guide learners to attain these ends sequentially. The teacher does choose the learning opportunities so that learners may achieve the stated objectives.

Humanists advocate the curriculum be kept as 'close' to the learner as possible when the curriculum is being developed and implemented. In the reading curriculum for example, humanism as a psychology of learning would emphasize that a large selection of library books on different topics and reading levels be available so that each pupil may select sequential books to read based on his/ her interests, purposes, and understanding levels. The pupil should be the chooser, not the teacher. The teacher may assist, however, if the pupil cannot decide upon a book to read. The teacher needs to have much knowledge of library books for children so that the latter's appetites may be whetted to encourage reading of self-selected materials. After the completion of reading a library book, the pupil may determine how to be appraised to reveal achievement. The pupil might then have a conference with the teacher to discuss content read. The pupil may also read a selection from the completed library book to reveal word attack skills and oral reading skills. There are numerous ways for pupils to reveal comprehension from reading a library book such as .

1. Drawing a picture of main ideas comprehended.
2. Making a model pertaining to major concepts contained in the library book.
3. Dramatizing selected scenes from the book.
4. Writing a summary of the contents.
5. Developing a different ending or beginning of the library book read.

Humanists then emphasize that sequence resides within the pupil who alone can order his/

her direction of experiences. The teacher has a difficult role here in being a motivator of learner achievement to encourage optimal attainment. A psychological sequence is then in evidence.

Balance among Objectives

There are different kinds of objectives for pupils to achieve. One approach in categorizing objectives is to stress three domains—cognitive (use of the intellect or mind), affective (develop positive attitudes), and psychomotor (neuromuscular skills). How much emphasis should be placed upon each of these objectives in teaching-learning situations? Should one category receive more emphasis than the other two? Educators disagree upon which category should receive more stress than the others.

Cognitive objectives have had a long history of being emphasized in the curriculum. In Colonial America, Puritan schools emphasized cognitive goals of instruction to the exclusion of other kinds of objectives. Thus with the coming of the Puritans in 1630 to the shores of what was then New England, pupils would memorize content such as the individual letters of the alphabet, syllables of two letters, syllables of three letters, words of four letters, as well as words of five letters. Memorization of subject matter was the highest level of cognition that most Puritan children experienced. Joseph Lancaster in his Lancastrian monitorial system of instruction, introduced in the United States in 1805, also had memorization as the major method of instruction. Basically, he emphasized the same sequence in reading as did the Puritans. Memorizing subject matter was stressed due to beliefs advocating the theory of mental discipline. The theory of mental discipline emphasized that mind is like a muscle and needs exercise through rote learning in order to become stronger. An analogy

was made here in that the muscles of the human body need to be exercised in order to be made stronger. The human mind then needed to receive exercise through drill in memorization in order to become stronger. Throughout much of the 1800's the major method of teaching in American schools was through becoming a good memorizer.

With the beginning of the 1900's, John Dewey (1859-1952) and William Heard Kilpatrick (1874-1967) emphasized problem solving as a major way of pupil learning in the curriculum. Pupils with teacher assistance selected the problems for attempted solutions. Problem solving can be stressed in any curriculum area such as in the literature curriculum. Here, learners choose a dilemma area where no clear-cut answer is available. Research is necessary using diverse reference sources to find needed solutions. For example, pupils reading about the thesis of Bishop George Berkeley that "to be is to be perceived" indicating that for something to exist, there must be an observer. Pupils could view their very own experiences to determine if a happening needs to have a human being there for the event to have occurred. Or can occurrences transpire without any human being there to observe its happening. Much thought and reflection would go into finding necessary answers.

Educational psychologists have identified numerous levels of thinking. The lowest level could be simple rote learning of information. A pupil in an ongoing unit of study could memorize the different parts of a friendly letter or business letter. There are important items that should be memorized. However, the teacher must have pupils attain objectives which stress higher levels of cognition. In reading subject matter, pupils should understand what has been read. Thus learners are able to say in their own words that which has to be read and has meaning attached to

it. Pupils need to be able to use what has been learned. Thus pupils should use what has been learned previously pertaining to "characterization," for example, when a new story or trade book is being read. Critical reading truly emphasizes higher levels of cognition. With critical reading, learners are able to separate facts from opinions, fantasy from reality, and relevant-irrelevant content. Creative thinking also emphasizes higher levels of cognition in thinking. If learners generate ideas in brainstorming pertaining to a different beginning or ending in a story, then creative thought is in evidence. In addition, appraising content read in terms of criteria stresses complexity of thinking. Criteria of accuracy may then be used to evaluate what has been read. Inaccurate statements are then identified and separated from the accurate.

Affective objectives are salient to stress in teaching-learning situations since they do guide learners to attain cognitive and psychomotor goals. Good effect or attitudes then stimulate pupils to achieve as optimally as possible. First of all, a pupil must desire to listen to others in conversation or in discussions in any curriculum area. If a learner has no desire to listen to others in discussion settings, achievement will tend to go downhill. Thus quality listening with intent to do so is necessary. However, higher levels of the effective dimension need to be attained. Responding actively to what has been acquired is needed for the second level of the affective dimension to be achieved. A sender of communication and a listener/responder is needed for wholesome interaction to occur. It takes quality attitudes from both sides of the communication cycle if learning from each other is to accrue. From these two dimensions, a third emphasizes that respect for each other is necessary. The more respect there is for all human beings, the better the affective dimension is being stressed. This is

true also for quality listening and responding to all individuals who are met and should be appreciated. Consistent respect for others is a necessity so that a pattern of human behaviour is in evidence. Here a positive affective dimension as well as improved attitudes are a salient end result. It is important if an individual desires to have all people treat others with respect and this treatment of others becomes a pattern of behaviour. A pupil who works in this direction truly has achieved as high as possible in the affective dimension.

Psychomotor objectives for pupils to attain involve using the large and small muscles as well as improving in eye-hand coordination. The teacher, for example, needs to have pupils attain the following psychomotor objectives in the language arts:

1. Write legibly in all curriculum areas.
2. Integrate knowledge, skills, and attitudes in diverse writing experiences.
3. Use the word processor with improved performance.
4. Develop art projects as they relate to ongoing units of study in the language arts, such as illustrating a poem that has been written.
5. Emphasize gestures, facial expressions, and body movements to enhance creative dramatics and pantomime activities.

There should be rational balance among cognitive, affective, and psychomotor objectives in the curriculum.

Relationship among Curriculum Areas

There are numerous separate academic disciplines that may be taught in the school setting. The following language arts areas, among oth-

ers, might then be taught separately from other academic disciplines in English:

- | | |
|-----------------------|---------------------|
| 1. grammar | 6. literature |
| 2. spelling | 7. punctuation |
| 3. handwriting | 8. formal writing |
| 4. oral communication | 9. creative writing |
| 5. reading | 10. listening |

When viewing the above separate subject areas, it is quite obvious that the teacher could relate curriculum areas so that fewer isolated subjects are taught. For example, items 5 and 6 above could easily be correlated. Pupils then would study reading skills within the literature curriculum. To further decrease the isolated language art areas, the teacher might well bring in oral communication skills (item 4 above) as the content in literature is being discussed in the classroom setting. Listening skills (item 10 above) could definitely be brought in as the content in literature is being discussed. What has been read and discussed in literature may be dramatized creatively or pantomimed; these are additional language art skills, not listed above that may be stressed in ongoing units of study. Much correlation, fusion, and integration of the language arts can easily be emphasized here. Presently, the integrated model of curriculum development is in vogue. If pupils perceive that knowledge is related, they will tend to retain previously acquired for a longer period of time as compared to learning subject matter in isolation, such as isolated facts.

Learning Opportunities

One problem in designing learning activities for pupils pertains to who should choose these activities. The teacher could solely select learning opportunities so that pupils may attain stated objectives. The arrangement of the tasks

would then involve the classroom teacher. Toward the other end of the continuum, pupils with teacher guidance may plan sequential learning activities for the former to participate in. Heavy pupil involvement in curriculum development is then in evidence.

A further problem pertains to the number of media available for teaching-learning situations. If behaviourally stated objectives are used in teaching, the teacher must choose the media that will guide learners in goal attainment. A single media may then be used since many behaviourally stated objectives tend to be rather narrow in scope. Thus if pupils are to describe the character in a short story, they can do this orally or in writing. Few media are necessary here, such as the literature book, pencil and paper, or computer. Toward the other end of the continuum, if pupils are to write plots of five writings by the same author, a variety of media will then be necessary. Thus if each of the plots is in a different literature book, at least five trade books will be needed. It might be that one plot to be noticed comes from a video-tape. A book on commentaries of selected literary selections may provide information on these diverse plots. A teacher who is strong on determining learning styles of individual pupils might indeed have and use many media of instruction since pupils will reveal their choice of media. Pupils, of course, should attain more optimally, thus forcing the teacher to base his/her teaching methods on the personal learning styles of individual pupils. In general, there are three styles of learning. First, selected pupils individually learn best from the abstract such as reading, writing, speaking, and listening activities. Others learn best from semi-concrete experiences such as from viewing illustrations, films, slides, study prints, video-tapes, video-disks, filmstrips, and drawings. Abstract experiences might be emphasized together with the semi-concrete. Still others learn best from

concrete activities. These include objects, models, realia, and the real environment. Here, the semi-concrete and the abstract may be stressed together with the concrete in teaching-learning situations. Abstract, semi-concrete, and the concrete might well be emphasized within the framework of unit teaching. The teacher must determine which kinds of learning opportunities best meet the needs of individual pupils and assist them in achieving as optimally as possible.

In thinking about learning styles of pupils, the teacher needs to consider which pupils like to work best individually on sequential tasks and which like to work within the framework of committee settings. Pupils individually learn best from different materials and diverse methods of instruction. No two pupils are alike in terms of interest, purpose, emotional development, and abilities. The teacher then must provide for individual differences and guide each to attain more optimally.

Evaluation of Achievement

Evaluation should be continuous and comprehensive covering all objectives emphasized in teaching-learning situations. There are numerous methods to use in evaluating learner progress. Thus the teacher may appraise pupil achievement solely using teacher written tests and teacher observation. Toward the other end of the continuum, the pupil with the help of the teacher may engage in self-evaluation. Appropriate criteria might be developed by the pupil with teacher guidance for self-evaluation by the former. In between the continuum, both pupil and teacher may appraise the former cooperatively using agreed upon standards.

Too frequently pupils alone are evaluated by teachers with no one in the classroom appraising the latter. The teacher has a salient role in self

evaluation. The following are recommended criteria for teachers to use in self evaluation.

1. Being well prepared for each day of teaching pupils.
2. Knowing the subject matter well that is to be taught.
3. Being interested in the welfare of each pupil.
4. Accepting pupils as having intrinsic worth.
5. Guiding learners to attain as much as individual abilities permit.
6. Setting a role model for pupils.
7. Speaking clearly so all may comprehend the spoken voice.
8. Listening carefully to what each pupil is saying.
9. Attaining respect and acceptance from learners.
10. Having much knowledge about each pupil so that individual differences are adequately provided for among learners.

A framework for evaluating pupils individually should include the following ingredients:

1. Assessing knowledge, skills, and attitudes acquired by pupils.
2. Noting growth among pupils in achieving cognitive ends stressing critical and creative thinking as well as problem solving
3. Achieving well in quality human relationships.
4. Attaining proficiency in the basic four vocabularies of listening, speaking, reading, and writing
5. Using the basic operations proficiently in arithmetic of addition, subtraction, multiplication, and division in school

and in society.

6. Applying significant principles of science to everyday experiences in the societal arenas.
7. Understanding salient facts, concepts, and generalizations in the social studies.
8. Attempting to stay healthy through a study of units and courses of study stressing health education.
9. Developing appropriate physical education concepts, main ideas and skills.
10. Becoming an avid consumer of literary endeavours and works.

In Summary

Teachers and principals need to consider quality as a concept when designing the curriculum. Thus educators must have excellent sequence from which each pupil may attain optimally. With good sequence, new learning acquired by pupils are related to that which was presented previously. There needs to be balance among objectives to be achieved by learners. Thus rational balance in teaching-learning situations must be in evidence among cognitive, affective, and psychomotor ends. A single category of objectives for learners to attain is definitely not adequate. Academic disciplines need to be related. Why? Educational psychologists have long stated that what is related will be retained better than that which is fragmented. Individual learning styles of pupils should be considered when learning opportunities are selected by the teacher so that pupils may achieve relevant objectives. Evaluating pupil achievement should be continuous to notice pupil progress. Remediation should follow diagnosis when evaluating pupil achievement.

Teaching of Concepts Associated with the Study of Globe and World Map

J. P. SINGH

Reader (Geography)

*Regional Institute of Education,
Bhopal - 462013*

In the Indian school set-up there are several teachers who teach geography without having basic degree in the subject. When they teach they normally do not do justice with the content and the pupils remain at disadvantage. The present paper is addressed basically to such teachers but it may be useful even to those who have basic requirement to teach the subject as it describes how the concepts should be transacted in the classroom situation.

In the absence of social science/geography teachers, any teacher is involved in the teaching of social studies in the schools of India. In such cases the social studies concepts, particularly those associated with geography, are not properly communicated to the learners. Consequently, the students memorise the related concepts without proper understanding. Lack of understanding leads to mis-conceptions which multiply progressively. How the concepts should be transacted to the learners have been described in the following pages. Presently, only those concepts which are associated with the study of the globe and map of the world have been attempted.

The Content

The earth we live on is a huge sphere. About 29 per cent of the earth's surface is land and the rest is water. Large masses of land are called the

continents and huge bodies of water the oceans. The globe is a model of the earth. True concepts about its shape, area, distance and direction can be had only from the globe.

Maps and globes are useful teaching materials. Like textbooks, they can be used as learning and teaching materials. With increasing interest in earth space relationship, the study of maps and globes has become absolutely necessary now-a-days.

Maps and globes have a symbolic language of their own and the children must know how to interpret them. As all maps and globes are made on certain scale, there exists a relationship between the distances on them and the distances they represent on the ground. The lines of latitudes and of longitudes show true east-west and north-south directions. They help us in locating places on the globe and maps. They have many other uses as well.

The axis on which the earth rotates has an inclination of $23\frac{1}{2}^{\circ}$ from the perpendicular position on the plane of ecliptic. This inclination and revolution of the earth round the sun make the days and nights unequal over most parts of the world. The sun's rays do not strike the earth surface at uniform angles at all places. Three types of heat zones namely hot, moderate and cold can easily be identified. Other elements of climate and weather depend primarily on temperature conditions.

Major Concepts

1. The globe is a true representative of the earth.
2. A world map shows all major areas of the earth.
3. Maps and globes have a series of parallels and meridians.
4. Distances can be measured with the help of scale.
5. Land and water are not uniformly distributed over the earth.
6. Only half of the earth illuminates at one point of time.
7. The sun shines vertically within the tropics only.
8. The average annual temperature decreases towards the poles.
9. India is located in the eastern hemisphere as well as in the northern hemisphere.

Activities for Different Concepts

Concept 1 : The globe is a true representative of the earth. For teaching this concept, you need a globe of an appropriate size and a map of India. Keep the globe at a place from where it is visible to all the

students, and say that this is the model of the earth. Show them the symbols for land and water. Ask them to identify India on the globe. Why is India on the globe smaller than that on the map? Some models may be bigger than the actual objects but normally they are smaller than the real ones. Spin the globe on its axis, both ways – west to east, and east to west. Clarify that the earth rotates from west to east or in anti-clock direction. Show them simple locations like oceans, continents, North Pole, South Pole, etc.

After performing above activities ask some questions like :

1. How does the earth look like ?
2. Show India, Australia and Greenland on the globe.
3. Where do you find the size of India bigger – on the globe or on the map?
4. If the earth rotates in its true direction which continent will come first – Africa or North America?
5. Name the continent on the South Pole and the Ocean on the North Pole

Concept 2 : A world map shows all major areas of the earth. For teaching this concept, you require a general map of the world and a globe. Let your students observe the map of the world and the globe. Allow them to turn the globe in the direction they like. Ask them to observe location of different continents and oceans on the globe as well as on the world map. Now, you ask the following questions:

1. Do you see the whole world on the globe at a time?

2. How much of the world you see on the globe and that on the map?
3. Identify different continents/countries and oceans/seas on the globe and on the map. What differences do you find in case of Greenland and South America?
4. With the help of a piece of thread measure the length of the equator, 45° north and south parallels, and 0° line of longitude on the globe and on the map. What conclusions do you draw?
5. How do the Poles appear on the globe and on the world map?

Concept 3 . Maps and globes have a series of parallels and meridians. Ask your students to observe major parallels of latitudes - 0°, 23½° N and S, 66½° N and S, and 90° N and S - on the globe and write the major characteristics or properties. Also ask them to observe the main meridians of longitudes - 0°, 90° E and W, and 180° E and W - on the globe and to note down the major properties. Ask them to perform these activities also on the world map.

Discuss with your students how the parallels and meridians are drawn on the globe.

Students observe the globe and the world map. Put the following questions to them.

1. Which is the greatest parallel on the globe?
2. Which is the smallest parallel on the globe?
3. What are the lengths of the 45° N and S and 60° N and S parallels?

4. At what interval have the parallels been drawn?
5. Do the parallels join with each other?
6. What is the length of 0° and 180° E and W meridians?
7. Are the meridians of the same length?
8. Do the meridians join with each other?
9. What directions do the meridians and the parallels show?
10. Do the parallels and meridians meet at right angles?

The teacher should tell the students the meaning of great circle and its utility.

Concept 4 . Distances can be measured with the help of scale. Students have already measured length of some parallels and meridians. Keeping this in view, ask your students to measure distances on the globe, map of the world and map of India, between places like New York and London, London and New Delhi, Moscow and Singapore, New Delhi and Bombay, Bombay and Calcutta, etc.

Let them measure first in centimetres. Now you may draw their attention towards the scale as given on the globe and maps. Ask them to convert the distances from centimetres to kilometres.

You may ask your students to measure the same distance, say between Ahmedabad and Madras, on the globe, on the world map and on the map of India. Generalise the results.

Tell your students the difference between a sketch and a map. Draw their attention towards essentials of a map.

and symbols which help them to read maps.

Concept 5 . Land and water are not uniformly distributed over the earth .The students have observed the distribution of land masses and ocean basins on the globe and maps at a number of occasions.

Turn the globe slowly in different directions and draw attention of your students to the parts where most of the land is concentrated, and where most of the water concentrates.

Discuss with them other patterns of the distribution of land masses and ocean basins. Ask them to collect the following information from atlases or source book :

1. Total area of earth
2. Area of the land masses
3. Area of the ocean basins
4. Areas of different continents
5. Areas of different oceans
6. The highest and the deepest portions of the earth etc.

Concept 6 . Only half of the earth illuminates at one point of time. To teach this concept you need a globe and a torch light or a lamp.

Students know about rotation of the earth .Convert the classroom into a darkroom .Throw light on the globe from various angles and ask your students to observe. What do they find?

Keep the globe in its right position.

(a) Ask your students to look at the North Pole, and turn the globe anti-clockwise. What direction does the earth rotate? (b) Ask your students to

look at the equator. Push your finger eastward to rotate the globe. Does the earth rotate in eastward direction? Discuss with your students how the earth rotates and how different heavenly bodies appear moving westward. Also explain how much time the earth takes to rotate once on its axis.

Ask your students to observe and answer the following questions .

1. Will the cubical and cuboidal bodies always illuminate half if light is thrown on them?
2. If the earth is rotating where will the sun appear first – in the west or in the east?
3. If it is noon over India what will it be over North America?

Concept 7 The sun shines vertically within the tropics only Set your globe in right position. Show your students how the axis of the earth is inclined at $66\frac{1}{2}^{\circ}$ from the plane of ecliptic or at $23\frac{1}{2}^{\circ}$ from the perpendicular position on the plane. Discuss various ways of showing inclination of the earth's axis How will the inclination of the earth's axis appear from different angles? Emphasise that the earth's axis is inclined in a particular direction and it does not change.

If you have a model to show the revolution of the earth round the sun, use it. Otherwise, consider your table as the plane of ecliptic and place four dusters to show the four positions of the earth round the sun. Now you draw a diagram of the same on the blackboard and explain how and when vertical rays of the sun strike the equator and the Tropic of Cancer and the Tropic of Capricorn

Discuss how the length of days and nights vary on different latitudes on the solstices and equinoxes.

You may ask the following questions and the like :

1. What are perihelion and aphelion
2. What areas on the earth surface get vertical sunshine at least a day in a year?
3. Where do we have six month - day and six month - night on the earth?
4. What are the areas where the sun is visible even at mid-night?

Concept 8 : The average annual temperature decreases towards the Poles. Discuss various sources of heat energy, the importance of solar energy in heating of the earth's surface, and various ways of transfer of heat from one body to another. Examine the factors that control the distribution of insolation, namely –

- (i) energy output of the sun,
- (ii) distance of the earth from the sun,
- (iii) transparency of the atmosphere,
- (iv) duration of daily sunshine, and
- (v) angle at which the sun's noon rays strike the earth.

Explain how the factors (iv) and (v) control the distribution of heat over the earth in three types of areas – within the tropics, between the tropics and the Arctic/Antarctic circles, and Polar areas.

You may put these questions to your students .

1. On an average, where does the sun shine for a very long duration?
2. At what angle the sun shines in the areas located to the north of the Arctic circle in the month of December?
3. Pointing to the location of heat zones on the earth, which zone of the earth is hot?
4. Where do you find frigid zones on the earth?

Concept 9 : India is located in the Eastern Hemisphere as well in the Northern Hemisphere. Draw the attention of your students towards the use of the lines of latitudes and that of longitudes in locating various places on maps.

Below are two sets of lines – vertical, resembling meridians and horizontal, resembling parallels (Fig 1)

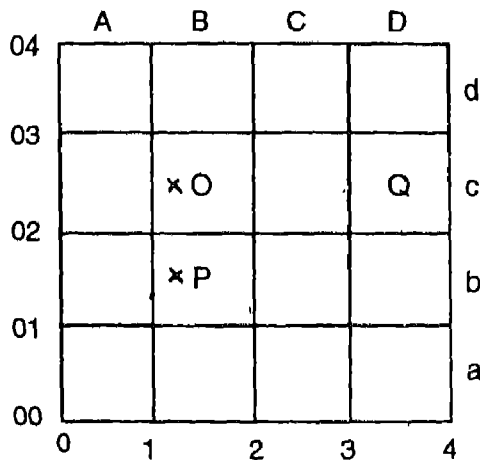


Fig. 1: Locating places with the help of lines.

0,1,2,3 and 4 are vertical lines
00,01,02,03 and 04 are horizontal lines.
A,B,C,D and a,b,c,d are areas between the lines.

How can locations O, P, and Q be stated?
You can write them in the following manner :

O– It is located to the east of line 1 and north of line 02. It is located in square Bc.

P– It is located in the middle of square Bb. It lies to the west of line 2 and south of line 02.

Q– It is located where line 3 and line 02 meet. It is located at 302.

The parallels of latitudes and the meridians of longitudes are reference lines on the globe. Ask your students to find out the location of India with reference to parallels and meridians.

You can also state the location of India with reference to nearby countries, oceans or seas. India is located to the east of the Arabian sea, or

to the west of the Bay of Bengal, or to the east of Pakistan, or to the south of China, etc.

Reference lines and symbols make the location or identification of places simple and easy.

Give your students a list of important conventional signs and ask to read them in maps.

Conclusion

A variety of methods have been used to teach the concepts. After observation of maps and globes, the students have been asked to answer related questions. Discussion with active participation of students has been made. Demonstration and explanation methods have also been used. Efforts have been made to keep the students active by creating appropriate learning situation. Think whether you can devise some other methods of teaching.

Home as an Agency of Education

HAJI SHAMSUDDIN
7/150, Batjnath Para
Raipur 492001 (M P)

Home is the best place for any human being to learn the first lesson of life. Consciously or unconsciously, the impact of home is explicitly visible in each individual's personality and character. It is the home where the child has his physical, mental, moral and emotional development. Besides, home fulfils the social, religious, educational and economic needs of the child. The first lesson of citizenship is taught at home. Hence, it is no denying the fact that home is an important agency of education. To make the atmosphere at home more positively influential on the personality development of the child, the parents should be much more careful.

“Home is the eternal school of life” It is here that the child has been getting education from times immemorial and will continue to get it till the last man exists on earth. History tells that great educators in the past have emphasised upon this great agency of education. The Greeks, it is true, did not hold very good opinion about women, hence they did not give importance to home so much; but Locke, Rousseau, Pestalozzi – all attached the greatest value to home as an agency of education.

Home has always been a source of pleasure, peace and happiness. A writer pointing out the difference between ‘house and home’ remarks: “House is a place on which the sun shines”, while ‘home is a place in which the sun (son?) shines’. As soon as a child comes into being, he has to take shelter in home and then gradually as

he grows older he starts to learn how to talk, walk, act, etc. He lives in a family which provides the best ground for training in social life. Here only children get all opportunities to develop themselves physically, mentally and culturally. Home fulfils all their needs i.e., economic, social, religious, educational, etc. Here only the child is trained to obey the orders of the elders and help the youngsters. The child inherits certain rights from his parents and in return is bound to do certain duties towards them in future. Similarly, it is home only where for the first time the child learns to live in discipline along with other members of his family and shares responsibilities of family when he grows old. Thus the first lesson of citizenship is being learnt at home only.

Like all other members of the family, the child has to participate in the social, religious and other activities of the family. The good qualities

of co-operation, good-will, self-sacrifice, etc are naturally developed and his social as well as moral character is formed. Things learnt at home become a part and parcel of the child's life and remain effective and permanent throughout his life. No lessons learnt in school can be so deep and impressionable as those learnt at home.

Thus we see that home has been playing a great role as an agency of education since the time of its establishment. It is only very recently that this responsibility is being shifted to separate institutions, with the advancement in industry and science, when, people have become more and more busy and engaged in numerous occupations, with the result the parents get less time to devote to children and so educational institutions have to be set up where children may be sent for education.

The activities of the child are limited to his family only in the early years of childhood and hence the environment at home has deep impression on his fresh and impressionable mind. Sense of freedom, care and affection come to him at home only. By copying others, he learns to speak and do other activities slowly and gradually. The early good habits in the child, formed at home only, turn into noble values like love, affection, truth, justice, self-sacrifice, etc, in future.

Influence of Home

Education means systematic and well-planned influences for the development of child. This is done in school largely through the medium of teacher. But in fact the child has already certain 'home' influences on him before his entry in a school and the teacher and school simply work on them and strengthen them. Thus home is still a powerful agency to mould the child in a particular form.

Though the responsibility of home to-day is shifted to schools still it plays a great part as a centre of social environment for him. The healthy influences at home go a long way in moulding and educating the child to reach a particular ideal.

Responsibilities of Home

There are innumerable duties and responsibilities of the home. For example, the home should take full care of the child's physical development. For this it should provide facilities such as wholesome food, clothing, comfort, play, etc. for the child. He should be taught to lead a life of cleanliness and form habits of regular exercises or going out for a walk in fresh air.

In the beginning children have tendency to know and learn about new things. For this they often put queries to their elders. Sensible parents give proper replies and satisfy their curiosity and contribute to the development of their powers of expression, understanding, conversation and discussion.

Many a time the child is neglected as insignificant at home. But it is very bad. In fact, due importance should be attached to his activities. Also, according to his age, he should be allowed to take part in the household activities so that he may be trained in different occupations with a sense of shouldering responsibility. It is here only that the habits of industry, constant efforts, discipline and sacrifice for others are formed building his ultimate character.

In early childhood years one has a tendency to play, act and do and undo things. Parents should realise this psychological tendency of children and should give them sufficient scope for the expression of this play-instinct. The duty of the home is not to thrust or force instructions on from outside but to realise their natural in-

stricts and enlarge, develop and guide them in their own interests. Thus the physical, moral and cultural base is formed here at home only on which the edifice of character is built in future.

In school the child remains in group and his individual needs, his abilities, faculties, etc. are hard to be recognised and paid attention to. For this, home is the best place. Here parents can pay individual attention to them and develop their personal-selves.

The child, though limited to his family environments, is curious to know about the broader world outside. It is the duty of ideal parents to recognise this and afford all possible opportunities for their intellectual development. The child, according to his taste, should be given books, newspapers, magazines or other materials to act and play with. At times, they may be allowed to move, observe and act, in garden, farm or workshop. It is here that their real attitudes and aptitudes will be recognised.

Sometimes it is observed that, due to some unfavourable circumstances in a family or due to some handicaps in parents, the child is unable to get proper, healthy atmosphere at home. Under such circumstances it is essential that parents should entrust the child to infant schools such as kindergarten or to any good boarding house, where they may get scope for their self-expression and formation of habits.

To conclude, both home and school are the

essential agencies of child's education. There cannot be water-tight compartments between the two. In fact, both are complementary to each other. If the home forms the base, the school is responsible for future construction over it. In other words, if the education of the child is to be made complete, there should be healthy co-operation between the two agencies; though, of course, it is an admitted fact that home and parents are chiefly responsible for everything, for if there is no sound base how can the future permanent and strong building of personality and character be built on it? United and harmonious efforts of both the parents and teachers can and do educate the child, in the real sense of the term.

In conclusion, a word or two about 'Parent-Teacher Associations', it is a good thing that now-a-days such 'associations' are being formed in certain places. Unless there is co-operation and understanding between parents and teachers, education will not be effective and fruitful. In foreign countries such associations help the school in so many ways. In America, they have a magazine (P.T.A. magazine), which is doing very good work in this direction and dealing with many educational problems. Time has come when merely recognising the importance of home and the influence of parents will not serve the purpose. It is necessary to harmonise the influences of home and school actively and effectively so that the child grows into the right type of citizen.

Attitude of Rural Primary School Children towards ETV

P K SAHOO

P MALICK

*Institute of Education,
Devi Ahilya Vishwavidyalaya,
Indore (M.P.)*

The Satellite Instructional Television Experiment (SITE) was launched by India in August 1975. It proved positively as a medium of instruction for education. As such, it was decided to continue the programme and now ETV programmes of Central Institute of Educational Technology are being extended to far flung areas through INSAT ID. It has occupied a supportive status in school education programmes. Students exposed to ETV have a positive impact. Similarly, it has its own importance for girls education as in rural areas they were deprived of outward activities. The present article is a research study based on primary school children to study the level of attitude towards ETV.

Educational Television (ETV) has entered the field of education as a significant component. The Satellite Instructional Television Experiment (SITE) was launched by India on 1.8.1975. Its main aim was to help people in their development endeavour. This experiment was recognised as a landmark in the history of mass communication. During this experiment television was made accessible to residents of 2400 remote villages of six states having four linguistic groups. The educational programmes introduced during SITE were of enrichment type. By and large these were found acceptable to the target viewers, proving thereby the success of television as a medium for

education. The policy makers, therefore decided to continue educational programmes through the territorial transmitters in all the six states under the scheme that came to be generally called as the post SITE project.

Currently ETV programmes of CIET are being extended to far flung areas through INSAT ID. These programmes are for children of age range 5-8 years and 9-11 years every week from Monday through Friday and for school teachers on Saturday. These ETV programmes are telecast for 45 minutes duration everyday. There are two programmes of 20-minute duration each,

one for the children of 5-8 years age group, other for the children of 9-11 years age group. The interlude of 5 minutes between the two programmes is for the change over. These programmes differ in different states viz., Maharashtra, Andhra Pradesh, Orissa, Uttar Pradesh, Bihar, Gujarat, and Madhya Pradesh.

There has been number of studies on effectiveness of educational television programmes at school stage through survey and experimentation. Studies like Sabramaniam 1988, Seth 1983, Kanade (1982), Jaiswal 1988, Doneriya (1988), Sinnathambis (1990) indicated the status of ETV as used by the primary school children and their positive reaction towards ETV. These have been experimental studies on effectiveness of ETV like Mody 1978, Saulat Rahman 1977, Piaganker 1978, Phutela (1980), Seth 1983, CET (1983), CIET (1984), Mohanty and Behara (1985), and Mishra (1994).

As stated above ETV has occupied a supportive status in school education programmes. It is expected that the primary schools supplied with TV facilities will make use of ETV as a part of curricular experiences. Students exposed to ETV programmes can develop positive attitude towards ETV. Attitude towards ETV will act as an indicator of success of ETV programmes. Furthermore there may be different socio-psychological variables which may affect attitude towards ETV. For instance, different programmes are telecast for lower and upper primary children respectively. Whether class level of students has effect on their attitude towards ETV is one of the questions to be answered. Similarly, media appreciation may depend on sex background of children. The girl students who are deprived of outward activities in rural areas may have more positive attitude towards ETV than their counterparts. Moreover, media acquaintance of students might have effect on attitude towards ETV.

These questions have been kept in focus of the present study.

Objectives

The study was conducted with the following objectives.

1. To study the level of attitude of primary school children towards ETV.
2. To study the effect of level, technology acquaintance and sex background on students' attitude towards ETV

Hypotheses

1. There will be no significant difference between mean attitude scores of lower primary and upper primary school children.
2. There will be no significant difference between mean attitude scores of high technology acquaintance children and less technology acquaintance children of primary school children
3. There will be no significant difference between mean attitude scores of boys and girls students.

Sample of the Study

The students of class III and V, of a primary school of Asureswar, Cuttack, Orissa constituted the sample for the study. In all 90 students, 45 each from class III and class V were selected as sample respondents. It is to be stated that the sample is selected from a rural area school having ETV as a regular feature of school activities.

Tool

For the purpose of measurement of attitude

of students towards ETV, an attitude scale was constructed and validated by the investigator. The Thurstone's method equal appearing interval scale was adopted for development of attitude scale. As per the first requirement for the construction of an attitude scale with equal appearing intervals, it was necessary to develop a fairly large number of statements about psychological object so that they could represent all shades of feelings towards the object i.e., attitude towards educational television. A list of 120 statements was prepared at the primary stage. Each item was rated by the judges on 11 points on the equal appearing scale starting from -5 to +5 with 0 as indifferent position i.e. -5, -4, -3, -2, -1, 0, +1, +2, +3, +4, +5. In total 20 experienced teacher educator experts and 20 research students of the Institute of Education, D.A.V.V., Indore were approached to rate the primary pooled statements with reference to the necessary guidelines for judgement, the "Thurstone scale" was explained to them in detail. On the basis of the response of the judges, the numerical values against each item were subject to the analysis of median (scale values) and quartile deviation (Q value). The criteria used for the selection of the statements for the final form of the scale were (i) low Q-value and (ii) scale values very close to each of the 11 positions of the scale. The final form of the attitude scale consisted of 16 statements. With the scale position one item each being very close to +5, -5, +4, -4, +1 and -1, two items each being close +3, +2, -3, -2 and 0.

Technology Acquaintance Scale

In order to know the technology acquaintance of students, a questionnaire was constructed by the investigators taking into consideration different media i.e. TV, Radio, Telephone, Computer etc. Those students exposed to different media more frequently were known as high

technology acquainted students and the students who were less exposed to media are known as less technology acquainted students. Looking into their scores, quartile and median values were derived. Those students who have secured less scores from the Q were known as low technology acquainted group and those who secured higher scores that Q4 were known as high technology acquainted group. In this study 22 students were high technology acquainted and 24 students were low technology acquainted students.

Analysis and Interpretation

The items responded by the sample students in the attitude scale were scored on the basis of the scale values as computed earlier. The mean value for attitude measurement of each individual was calculated. Further, these mean attitude scores at individual level were treated as the attitude score of each individual. The students' *t* test was applied for testing null hypotheses of the study.

TABLE 1 *Significance of difference between mean attitude scores of upper primary stage and lower primary stage students*

Level of Students	N	Mean	SD	df	t
U.P. Stage	45	2.065	.939		
L.P. Stage	45	1.913	.955	88	833 NS

NS= Not Significant

As stated in the objective it was intended to study the attitude of primary school students. In this context the null hypotheses was stated that there will be no significant difference between mean attitude scores of upper primary stage and lower primary stage. In this context it can be

observed from Table 1 that the obtained 't' value i.e. .833 was not found to be significant at .05 level of significance. It shows that there was no significant difference between the mean attitude scores of upper primary and lower primary stage students. Hence the null hypothesis that there will be no significant difference between mean attitude scores of upper primary stage students and lower primary stage students was not rejected.

TABLE 2 *Significance of difference between mean attitude scores of high technology acquainted group and less technology acquainted group*

Group	N	Mean	SD	df	t
High Technology	22	2.943	.479	44	7.5478*
Less Technology	24	.81	1.259		

*Significant at .01 level of significance.

It can be also observed that the obtained 't' value i.e. 7.54 was significant at .01 level of significance. Hence the null hypothesis that there will be no significant difference between the mean attitude scores of high technology acquaintance students and less technology acquainted students was rejected at 99 per cent level of confidence. It shows that the mean attitude scores of upper primary stage students (2.943) is higher than mean score of less technology acquainted group i.e., .81. It shows that technology acquaintance has significant effect on attitude of students towards ETV.

TABLE 3 *Significance of difference between mean attitude scores of boy and girl primary students*

Group	N	Mean	SD	df	t
Boys	57	1.82	.780	88	5.9623
Girls	33	2.24	1.070		

**Significant at .05 level of significance

It can also be observed that the obtained 't' value i.e. 2.0 was significant at .05 level of significance with df=88. Hence null hypothesis that there will be no significant difference between the mean attitude scores of boy and girl students was rejected. It shows that the mean attitude scores of girl students i.e. 2.24 is higher than the mean attitude scores of boy students (1.82). It shows that sex background of students had significant effect on attitude towards ETV.

Discussion

The study reveals that there did not exist significant difference between the mean attitude scores of lower primary and upper primary students. It can be commented that these two groups belonged to the same population of primary stage. The class level did not have significant effect on students attitude towards ETV. As a whole both the class students expressed high positive attitude towards ETV. In other words, use of ETV on regular basis has been successful in development of positive attitude towards ETV.

The study also reveals that there existed significant difference between the mean attitude

scores of high technology acquainted students and less technology acquainted students. The high technology acquainted students expressed high positive attitude towards ETV whereas less technology acquaintance students expressed low positive attitude towards ETV. It can be commented that the high technology acquaintance students have higher level attitude towards ETV than the low technology acquaintance students counterparts. ETV proves as an effective mode of instruction among primary school children. Even though less technology acquaintance students have positive attitude towards ETV, they do not rate ETV significance at higher level of high technology acquaintance students counter-

parts. In all acquaintance of communicated technology has significant effect on students' attitude towards ETV.

The study also reveals that there existed significant difference between mean attitude scores of boys and girls students at primary stage. The girl students expressed higher positive attitude towards ETV whereas the boy students expressed low attitude towards ETV. It shows that ETV has been treated as more emphatic means of education for girl students. In the context of Indian society system the girl students who have several barriers to move freely for face to face interaction based studies perceive the significant role of ETV in primary education.

Classroom Activities for Language Teaching

B. BANERJEE
1039, Sector 8,
R K. Puram, New Delhi

Though language a child communicates his/her thought and feelings. The teaching of language is very crucial and important. In fact children should be taught and trained carefully to use language in their day-to-day life correctly. The task of the teachers is to bring the learner into contact with the language already selected and graded for him so that he/she can begin to recognise, understand and use them in suitable situations. For this the teacher can take the help of simple techniques. The present article suggests certain activities which will keep the learner involved in the task of language learning. It would also help them in modifying their conversational skills. There are certain language games, memory games, guessing games, reading and listening games which would create interests in young minds

Language is the centre of all activities. All classroom teaching and learning is based on language. In fact, it will be a silent mute place without the "chirping" of these students, and the teacher's mighty yells to quieten them trying hard to teach, to speak, read and write correctly.

The teacher certainly is an important figure in the classroom, but there is someone who is even more important --- and that is the learner (the student). It is the learner who is at the centre of the entire process of instruction in the classroom. Books are written, teachers are employed and examinations are held only in order that the learner may learn. The teacher's responsibility is to help the learners learn by making the learning material easy and simple.

The traditional classroom procedure of presentation, drilling and practice may help students to accumulate and store information, memorise part of the language and reproduce some at times. But until language has been activated, to be used in functional situations, either for easy recognition or production, it cannot be considered fully learnt.

Teachers do have clear-cut aims -- what to teach, how to teach and why to teach, but experienced teachers will understand the learners first, create plenty of opportunities for exposure and the use of language. Exposure to language should be in a well organised planned manner, which is simple and easy enough for the learner to filter the language items according to his needs.

and the stage of language development

The teacher's task is only to bring the learner into contact with the language-already selected and graded for him, so that he can begin to recognise, understand and use them in suitable situations. The increase in the stock of words and structure should be accompanied by more and more exposures, which will enable the learner to think, and develop the natural urge to have more and more words at the command to express himself. He will thus make the maximum and effective use of the language.

Besides the textbook, the teacher can take the help of simple techniques for the teaching of language. Activities such as miming, role playing, guessing games, dramatization, group activities, newspaper clippings, pictures, language games, simple conversation, peer-work, and other similar activities, which will keep the learner involved in the task of language learning.

These techniques though very simple are not commonly adopted in all classrooms.

Through these activities the teacher can

- provide plenty of *opportunities* for the learner to encounter with different types of situations and feel the need to use language,
- help the learner to have plenty of opportunities to *think*, imagine, act and speak,
- create opportunities for the learner to make *mistakes*;
- provide *feedback* with immediate correction of errors,
- develop *confidence* in the learner to express himself freely

Some Strategies and Aids

1. Textbooks
2. Drawing pictures on blackboard
3. Action plays
4. Articles/pictures/drawings/flash cards/charts/sign boards
5. Language games (thinking games)
6. Story books and magazines
7. Simple language tasks
 - Drawing of objects/persons/animals/birds
 - Writing about persons/objects/things and animals.
8. Locating things/persons in room/garden/park/shop/classroom
9. Paper cutting
10. Plasticine/wet mud
11. Flannel board
12. Group work
13. Puppets

Some Useful Activities

Given below are some simple activities that a teacher may undertake to enhance language learning of children.

Activity 1 : The teacher asks the student to find and point out a word beginning with a given letter such as:

Example A, B, O, R, M.

- Find a word beginning with a given letter and ending with another given letter.

Example . W-h, C-h

Activity 2 A Children may be asked to fill the following table

Name of a boy	Name of a girl	Name of an animal	Name of a fruit
---------------	----------------	-------------------	-----------------

- 1.
- 2.
- 3.
- 4.
- 5.

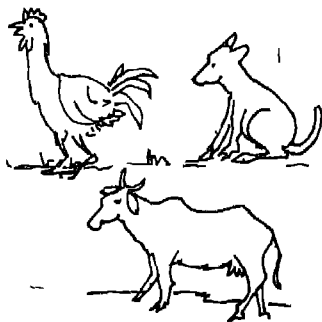
Activity 2B For higher grades the above activity may be modified/alterd/expanded

Write the names of five boys, five girls, five animals and five fruits beginning with the letter 'A' Fill in the table given below:

Name of a boy	Name of a girl	Name of an animal	Name of a fruit
---------------	----------------	-------------------	-----------------

- 1.
- 2.
- 3.
- 4.
- 5.

Activity 3A Draw three animals (e.g dog, hen, cow)

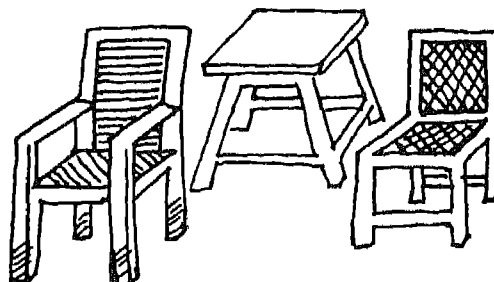


Now the teacher may ask the following questions

- Which animal is most dangerous ?
- Which animal runs fast ?
- Which animal gives us egg ?
- Which animal gives us milk ?
- Which animal has two legs ?
- Which animal has horns ?

Activity 3B Draw pictures of three things, (for example - stool, chair, armchair), and ask the following:

- Which is the most comfortable to sit on ?
- Which is the least comfortable to sit on ?



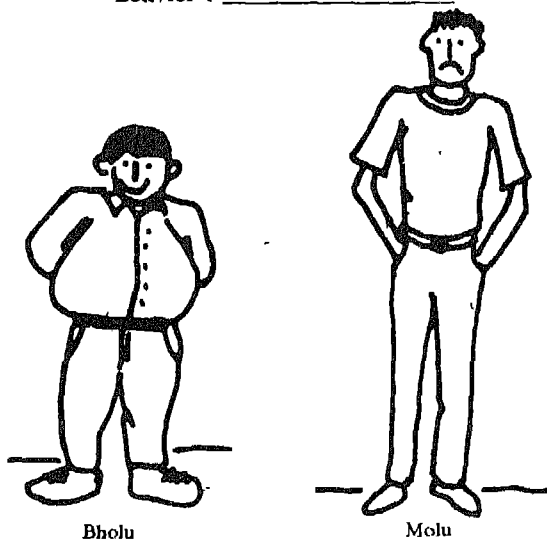
Activity 4 : Answer the following questions

1. Which is longer - a week or a month
2. Which is sharper - a knife or a spoon
3. Which is bigger - a spider or a fly
4. Which is faster - a plane or a car,
5. Which is stronger - a mouse or an elephant.
6. Which is hotter - summer or winter.
7. Which is smaller - a cat or a mouse
8. Which is sweeter - honey or jam

9. Which is harder – iron or wood
10. Which is softer – cotton or bandage

Activity 5 : Draw the figures of two boys (Bholu and Molu) Showing the picture to the children ask the following questions:

- Who is taller ? _____
- shorter ? _____
- happier ? _____
- thinner ? _____
- funnier ? _____
- heavier ? _____



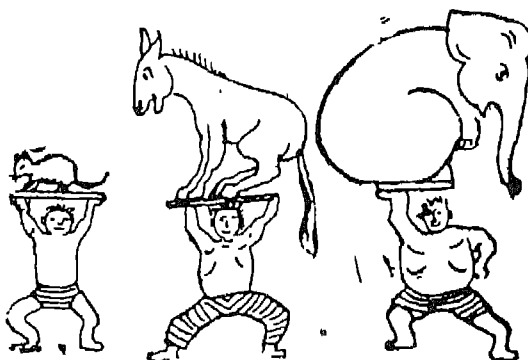
Bholu

Molu

Activity 6 : Answer the following questions :

1. Mr. A is a strong man Who is stronger than Mr. A?
2. Who is the strongest man?
3. Which animal is heavier than the horse?

4. Which animal is the weakest?
5. Which animal is larger than the mouse but smaller than the elephant ?



Mr. A

Mr. B

Mr. C

Activity 7. The names of many animals and birds are hidden in this box. Search them and write their names in the given blank

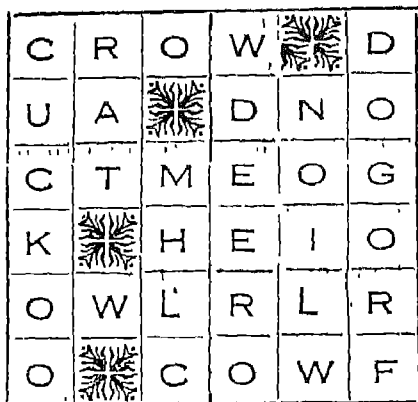
Animals

Birds

- | | |
|----------|----------|
| 1. _____ | 1. _____ |
| 2. _____ | 2. _____ |
| 3. _____ | 3. _____ |
| 4. _____ | 4. _____ |
| 5. _____ | 5. _____ |

Activity Complete the exercises with the following group of words :

- a uniform and a whistle
- a brush and a box of paint
- a hammer and a saw
- a bag and a bike
- a knife and meat



- a bucket and a ladder

Example I

1. Ram is a window cleaner. He has _____
2. Shyam is a butcher. He has _____
3. Bholu is a postman. He has _____
4. Kalu is a carpenter. He has _____
5. Raju is a decorator. He has _____
6. Sonu is a policeman. He has _____

Example II

Robin says, "I always wanted to be a butcher, but
I do not have"

Example III

I have a bucket and a ladder, so I can do the job
of a

Example IV

If I give my bucket and ladder to the, he
will give me his

Activity The teacher will ask the following questions

Tr. : What do you have for breakfast?

St. : I have a cup of coffee.

Tr. : (To another St.) What do you have for breakfast?

St. : I have milk.

Note : The aim is to stimulate the child to speak. The structure "I have" If need arises vocabulary items may be supplied. Students must have free choice to answer.

Activity 8 . Have some pictures/common objects in the classroom. Pointing to the objects the teacher will say

Tr. : This is aand that is a... ..

(The pupils can answer in chorus or individually)

Activity 9 . Divide the class into two groups. One group will ask questions and another will answer. Pupils can also presume themselves to be a fast baller, batsman, actor, singer, teacher, swimmer, pilot, doctor all according to their own interest. An example of the question answer session is given below.

Example

Group 1 : What are you ?

Group 2 : I am a teacher

Group 1 : How many students do you teach?

Group 2 : I teach ten students.

Group 1 : What subject do you teach?

Group 2 : I teach Science

Topics for Conversation

To help children develop conversation skill it will be desirable to have conversation session in the class. The following examples may be used.

1. Begin by asking a pupil . I'm a teacher. What are you? Then let the other pupils ask each other the same question, the children can invent jobs
2. The students can ask each other about animals. Begin by asking . I have a pet dog, what have you ?
3. Begin by asking about (profession and work)

Tr. . I am a doctor – What work do I do ?
 – Where do I work ?
 – What things do I use ?

Tr . (example) I am a teacher/fruitseller/
 milkman

4. Tr. Where is your father/mother/brother/
 sister. ?

St. (Given free choice to answer).
 At home/office/factory/market/shop/
 church.

Comprehension Exercises

To help the children develop basic skills in language, i.e. listening, speaking, reading and writing, they may be encouraged to listen or read simple sentences and then asked to complete some informations. It will be interesting if these sentences reflect some inherent values such as small family, protection/awareness of environment, human occupation, etc. One example of such exercise is given below.

Mr Verma, Mr. Sharma and Mr Gupta

work in the same office.

Mr Verma lives in a house in Block A/5 in Vinay Nagar. They have only one girl named Rekha. They have a car, T.V. set, fridge and a washing machine. Rekha has a bicycle.

Mr. Sharma lives in a house in Block F/70 in Ram Nagar. They have two sons named Bunny and Sunny. They have a T.V. set but do not have a washing machine. They need two cycles for their two sons. They have a fridge.

Mr Gupta lives in a house in Block No. C/ 29 in Roop Nagar. They have five children named Belu, Shalu, Chimu, Nishu and Annu. Mr. Gupta has a bicycle. They do not have a car nor a washing machine. They have a very old T.V. set. They are planning to buy a fridge.

Exercise

	Verma	Sharma	Gupta
1. Name of the family			
2. Name of the place	----	----	----
3. Block No	----	----	----
4. Children (No.)	----	----	----
5. Car (yes/no)	----	----	----
6. Bicycle (yes/no)	----	----	----
7. Fridge (yes/no)	----	----	----
8. Washing machine (yes/no)	----	----	----

Activity . Take away the one which does not belong to the group
 – Chalk, pen, pencil, rubber.
 – car, cycle, scooter, motor cycle

Teacher Why did you take that out ?
 or why does it not belong to that group ?

Interesting Language Games

These games can be used as initiator games

for acquiring new vocabulary or phrases and also as an evaluation/recapitulatory exercise

Memory Games

To check/test students

After teaching a couple of new vocabulary, keep the things away, and ask the students :

Tr : What did I show you ?

St : (Answer)

Tr : What is it used for?

St : (Answer)

Note : Students will remember what they had seen. The activity may be on spelling also

1. What is this ?
2. What are the parts of the tree?
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

Add other question in accordance to the grade and level of the learners

Activity : Tick the following :

Words	Break	Stitch	Cut
1. Nut	--	--	--
2. Orange	--	--	--
3. Potatoes	--	--	--
4. Pencil	--	--	--
5. Cloth	--	--	--

Note : For lower classes objects/pictures can be shown

Guessing Game

To encourage students, to guess correctly and express themselves in simple words/sentences.

Tr : (Putting his hand in his pocket)

- What do I have in my pocket ?

- What is in my hand ?

- What things do you find in the kitchen ?

- What do you find in a vegetable shop ?

- What things do you find in a school bag ?

- What things do you find in mummy's purse ?

- What things do you find in your father's pocket ?

To teach or evaluate the correct use of grammar, the following games can be done with the students.

Adverb Game

Teacher asks student (A) to go out of the class while the other students will think of an adverb.

Tr : How did he go out ?

St : slowly/fast (Many responses will be encouraged)

Tr : Where is he going ?

St : Home (Many responses will be encouraged)

Tr : When will he return ?

Noun Games

Tr : I am going to school. What will I take with me ?

Tr : I am going to the market. What will I buy?

Tr : All of you like fruits. What are the fruits that you don't like ?

Tr : What drinks do you take in summer/winter?

Verb Games

Teacher tells each student to do an action.

Students will themselves do an action. The other students will guess the action.

Find or think of guessing games to practise.

- Prepositions
- Action words
- Teaching number
- Nouns
- Articles

To develop speaking skills among students, the teacher can create a situation

Activity Students are grouped in pairs, and a role is allotted to each student, and they are encouraged to speak simple sentences

for example : doctor and patient
 teacher and student
 customer and shopkeeper

Topics for Conversation

- requesting

- describing
- reporting information
- defining
- explaining
- greeting
- inviting

Checking Vocabulary

1. Sorting and Classification

Write the word that does not belong to the same class

Example : cat, dog, rat, fish *Fish*

1. fork, spoon, knife, dish
2. shoes, sandals, socks, slippers
3. Milk, water, oil, tea
4. grapes, banana, potatoes, orange
5. stool, chair, bed, sofa

2. Word games or puzzles

Each student chooses a letter of the alphabet and fills in the following :

Example : I know a (adjective) man whose name is (Man's name). He lives in (town). He is a (job). He likes (Name of fruit). He has a (animal). He loves (food).

Example - Here is an example of words beginning with the letter 'B'.

I know a bad man whose name is *Bhola*. He lives in *Bhatinda*. He is a *butcher*. He likes *banana*. He has a *bear*. He loves *bread*.

3. Word Bingo

Each student has a card/piece of paper with

drawings/words written/drawn on them. The teacher reads out the *definition* and the students coming in that group cluster together.

Card No. 1 · LION · APPLE · CHAIR · BREAD

Card No. 2 · PEN · BED · BOY · BEAR

Card No. 3 · RUBBER · ORANGE · TIGER · CHAIR

'Definition' – found in the zoo
 – name of fruits
 – we keep in the school bag
 – things found in the house

Reading Games

1 *Flash card game* - The teacher has pieces of card with various commands written on them, students have to read them and do accordingly.

Example Pick up the bag
 Stand up
 Look at the black board
 Sit down

Reading/listening game to be played in pairs

Students will sit in pairs. Each student has one card. On the card is list of words. One student will read the words and the other student will listen and put a cross if the word is written on the card.

Card

1 dog

2 pen

3 cat

4 rat

Card

1 boy

2 rat

3. car

4. dog

The above game can also be played in other ways, for example classifying, matching, eliminating the one that does not belong to the group. A matching game is given below.

Card

1. boys

2 dog

3 cat

Card

bone

milk

pen

3 Make five sentences from the table

The boy is running

dog barking

cat sleeping

Conclusion

It is generally observed that children learn better when the teaching material is presented in the form of games and activities. Learning thus becomes fun and they respond well. This is specially the case with English which is taught as a second language and the child's exposure is very limited. These games and activities can provide the teacher with some material to supplement the classroom teaching.

Educational Integration for Children: A Conceptual Discussion

KAMLESH RAI
Research Associate
DPSEE,
National Council of Educational
Research and Training
New Delhi

Apart from a few unique programmes and private initiatives, one might say that the history of man's genuine concern for, and systematic efforts to help those with handicaps goes back about 200 years. "The spiritual impetus was mostly provided by the Swiss-French philosopher Jean-Jacques Rousseau, whose philosophical and educational writings inspired the early pioneers (Juun, 1978, P.322). In these early years, most of the innovative planners and also programmes were in Europe. Here, early research was conducted on people with intellectual handicaps, Abbe Sicard developed a sign language for the deaf, and Louis Braille invented one for the blind.

Until middle of this century, persons with handicaps were segregated and restricted in their rights and opportunities by both law and common practices. Such persons were often not allowed to marry, to have children, to vote, and they were denied protection against discrimination. They were isolated for perhaps the same reasons and motives common in all countries, namely, they must be protected and shielded from the community at large, and the community at large must be spared the uneasiness and discomfort seeing them and being reminded of their existence. Although charitable organizations could provide shelter and services for some, their efforts were not nearly sufficient. Most of the voluntary and charitable institutions, which were established

during the nineteenth century and the beginning of the twentieth century, had segregated facilities. The education and care which these private residential institutions had provided did not allow a normal existence.

Thus, persons with handicaps have had a long and telling history that we believe lends an excellent example of a disenfranchised group of human beings (that transcends all countries and cultures) who have been systematically denied of their human rights and privileges. Over the course of time, reforms have been brought about which increased their opportunities to live a more normal way. While education was at one time off-limits, or else largely inaccessible to

this group, later we find that segregated special educational provision was made available ; and today we find an ever-growing trend towards integrating them into the mainstream schools

Education for Children with Special Needs

In both the history and literature of persons/children with special needs, it is apparent that regardless of time or place, children with special needs have been looked upon and considered as deviant children: Wolfensberger (1972) further described this misnomer of deviancy to include the beliefs that children with special needs were sub-humans, men-aces, objects of dread, diseased organisms and objects of ridicule and pity.

'When we review society's efforts to handle deviancy, we can readily classify these efforts into four categories; destruction of deviant individuals, their segregation, reversal of their condition, or prevention thereof. In the past, some kinds of deviance were seen to be the work of the devil or other malignant forces. As such, the deviant person was perceived as evil too, and was persecuted and destroyed in order to protect society. As a more humane alternative to destruction, the deviant person who is being perceived as unpleasant, offensive, or frightening can be segregated from the mainstream of society and placed its periphery. Deviance can be seen to be someone's fault or perhaps a sign that the deviant person's parents had sinned and were therefore being punished by the God. The belief that blemished offspring is a punishment for parental wrong doing appears to be deeply ingrained in the unconscious of the people. Often, this belief is overly expressed (P.24).'

While many children with special needs of one time moved to residential homes where they were hidden from society, and usually not pro-

vided with educational opportunities, today education for children with special needs is recognized as a right in most countries. However, even in countries where education is said to be compulsory for all, it is likely that many children with special needs do not attend school either because provision is limited or enforcement is not strict. According to a study of 58 countries (Unesco, 1988), there were 19 countries (33%) where some children with special needs have been excluded, and seven countries (12%) where education was still not compulsory

Residential schools are the oldest form of educational provision for children with special needs. They tended to be built away from population centres; they were largely segregated, sheltered asylums with little community contact. After World War II most countries moved toward legislation for compulsory education for all, and this led to expanded educational provision for children with special needs although it was usually still segregated.

However, based on humanistic and egalitarian ideals, slowly the concept of education of the children with special need underwent tremendous change. The strategies of integrated education of children with special need came to be accepted in principle. This notion spread to other human service areas in many countries. The United Nations Declaration on the Rights of Mentally Retarded Persons (UN, 1971) notes that the person with an intellectual handicap has, to the maximum degree of feasibility, the same rights as other human beings. In recent decades, the idea of integration was provided as a concrete measure of normalization. This meant children with special needs were to be given the opportunity and accessibility to patterns of life and living conditions which were as close as possible to the societal norms.

Concept and Categories

Affecting about 10 per cent of the world's population, disability should be considered as a major medical, social, psychological and economic problem, the magnitude of which can be expected to increase in the future.

Health authorities and medical practitioners have in the past been more attentive to the problems of mortality and acute morbidity than to the less dramatic problems of long-term impairment and permanent disability. A greater understanding is badly needed of disability, of its causes and consequences, and of what can be done to reduce its impact. Disease oriented medicine needs to be complemented by disability-oriented medicine, and it should be realized in every country that the objectives of medicine are not only the prevention and cure of disease but also the optimum restoration of the individual's normal social function.

In current usage the term "impairment", "handicap", "disability", "prevention" and "rehabilitation" are often confusing. For several years now the World Health Organisation has been instrumental in developing an international classification of diseases (the ICD code), which deals mainly with diagnoses but not with the outcome of diseases or with health status measurement, such as "disability". Thus, there is a need for a complementary pattern to describe the changes in social role resulting from the disease, i.e. impairment, disability, handicap.

It is quite clear that agreement on the definitions of terms in this area will not be reached for several years. However, in 1980 the World Health Organisation published, for trial purposes, a manual of classification relating to the consequences of disease, the International Classification of Impairments, Disabilities and Handi-

caps. The manual contains three distinct classifications each relating to a different plane of experience consequent upon disease

Impairments : Concerned with abnormalities of body structure and appearance and with organ system function, resulting from any cause; in principle, impairments represent disturbances of the organ level.

Disabilities . Reflecting the consequences of impairment in terms of functional performance and activity by individual; disabilities thus represent disturbances of the level of the persons.

Handicaps . Concerned with the disadvantages experienced by the individual as a result of impairments and disabilities, handicaps thus reflect interaction with and adaptation to the individual's surroundings.

Example .

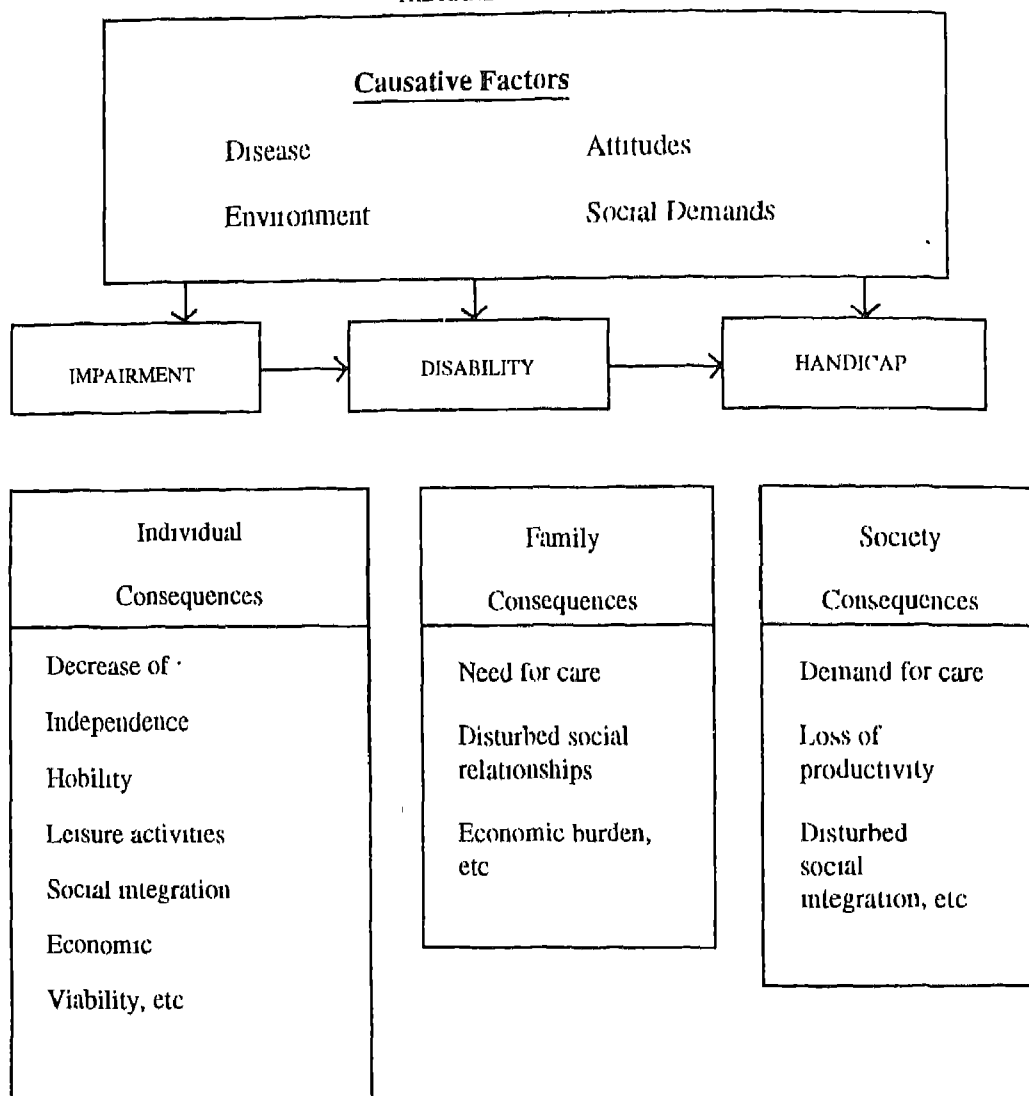
Impairment . Loss of leg.

Disability . decreased ability to talk.

Handicap : decreased ability to work, to enjoy normal social activities (sport, dancing), and to make social relationships.

Different interpretations of the concept "handicap" have been dealt with and discussed by many researchers. The World Health Organisation, defines a handicap as follows : A handicap is a disadvantage for a given individual, resulting from an impairment or a disability, that limits or prevents the fulfilment of a role that is normal (depending on age, sex and social and cultural factors) for that individual' (WHO, 1980). Although this concept of 'handicap' is still

THE HANDICAP PROCESS



unclear in respect to the relationship between individual and the environment or society, Soder (1981 b) points out that it is closely connected to the integration or normalization principle and provides us a useful framework for the understanding of the concept of 'handicap'

Moreover, the problem of definition and classification of children with special need has always been difficult, often controversial – for researchers and practitioners to manage. This tend to be especially true in the evaluation and identification of person with intellectual handi-

caps Research has shown these procedures to be inaccurate and rather arbitrary, often a response to political and social pressures. In her article dealing with learning disabilities, Sleeter (1986) pointed out how the classification of students with low IQs depended largely upon their background during the early development.

According to an investigation in 1987 (Unesco, 1988), most countries have specific legislation relating to special services and the categories of special needs varied from country to country, although seven general categories became apparent in this International Survey of Special Education (these definitions are largely derived from the Terminology of Special Education (Unesco, 1983).

Emotional Disturbance : Emotional disturbance refers to problems of behaviour, communication and adjustment which involve the control and expression of feelings

Hearing Impairment . Hearing impairment refers to an incapacity due to defect of hearing.

Language Disorder Language disorder refers to deficiencies in the expression and comprehension of language in oral, written or other forms, but not attributable to defects in the periphery, sensory or motor systems

Learning Disability : Learning disability refers to a disorder in one or more of the basic psychological processes involved in understanding or in using spoken or written language. These may be manifested in disorders of listening, thinking, talking, reading, writing, spelling or arithmetic.

Mental Retardation Mental retardation refers to sub-average general intellectual functioning which becomes evident during the developmental period and is associated with impairment in adaptive behaviour. This impairment may be reflected in (a) slow rate of maturation (b) reduced learning capacity and/or inadequate social adjustment, present singly or in combination. Children with intellectual handicaps are generally placed in four categories (mild, moderate, severe and profound) based on the amount of deviation of their IQs from the mean

Physically Handicap : Physically handicap refers to incapacity due to impairment of movement. This can result from muscular and neuromuscular disorders, or from skeletal deformations. Some countries also include visual and auditory disabilities in this category

Visual Impairment : Visual impairment refers to an incapacity due to defect in sight.

Types of Educational Programmes

There are two types of educational programmes for children with special needs.

01. Special school programmes, and
02. Integrated education programmes.

01. Special School Programmes : Special Schools are schools where all students are special needs children (SNC). Often these schools are residential schools where SNC live and study during the school year and return home on weekends and/or during school vacation

The first school of this type was started in France in 1785. For over two hundred years special schools have been the major system used to provide education services to SNC.

02 Integrated Education Programmes · Integrated education programmes are programmes where SNC attend a regular school in their home community. The students usually live at home and go to the same schools with normal students. They study in the regular classroom with the regular teacher but receive extra help or “support services” from a resource teacher/or special education teacher who has been trained to work with SNC. This system was started in America in 1900 and became popular there and in other countries in the mid - 1960's. This approach to education of SNC was adopted in our country.

Which System is Better?

Since the first integrated education programme started in 1900, the question has been asked again and again which system is better for SNC. Professionals in the field of special education have discussed, argued, and debated about this question. Still the question has not been answered.

Both systems have definite advantages and disadvantages. There are some very good special schools for SNC. Other special schools are no more than homes that care for SNC without trying to educate the children. The same is true for integrated education programmes. There are some well-run integrated programmes in which children receive excellent education, but there are other programmes which are poorly run and where the SNC is placed in the back of the classroom and ignored. The question of which system is better is not as important as knowing the advantages and disadvantages of both the systems.

Advantages of Special School Programmes

01. The teachers in special schools are trained either in special training or have on the job experience to teach SNC. Therefore, the children are always in contact with a teacher who can help them with their special needs. In integrated education programme this may not be true. The classroom teacher may be trained in teaching normal children but not SNC. For special training the SNC may have to wait until the school has a special teacher trained to teach SNC.
02. Because all the students in a special school are SNC, the school can more easily afford to provide special equipments. In an integrated programme a school can not easily afford to buy equipments and books especially needed for SNC.
03. The class size in a special school is usually small with a low pupil-teacher ratio. It is easier for the teacher to provide individual attention when the class size is small. In an integrated programme the classroom teacher may have 40 to 50 children in the class besides the SNC. The classroom teacher does not have as much time to give individual attention to students as a teacher in a special school.
04. Most special schools are residential. Children have more time before, during, and after school to get training in special subjects. For example, visually impaired children need an orientation. It is more difficult in integrated programmes to find the time to teach these important subjects since the student is only at school during the school day.

05. Special schools can develop special curriculum for subject areas specifically similar to SNCs that might be more difficult for SNC children. In integrated programmes, the blind or low vision children have to follow the standard school curriculum because they are attending a regular school.

Advantages of Integrated Education Programmes

1. In integrated programmes, the special needs children live at home and attend regular schools near their home, they are not separated from their parents, brothers, and sisters but continue to be member of the family. In special schools, the children are usually separated from their families and live at school. The students might have the opportunity to visit their families only once or twice a year. This lessens the interaction the children have with their parents, brothers, and sisters.
2. Integrated programmes are less expensive than special schools. Special schools require land on which to build school buildings, dormitories and so on. This can be very costly. The special school must also pay for the ongoing cost of providing food, clothing, and health services to the students living at the school. Because integrated education programmes do not have these ongoing expenses, educational services can be provided at a lower cost.
3. In integrated programmes SNC go to schools with non-disabled children. Everyday they have the opportunity to play and learn with other non-disabled children. This interaction helps the SNC to better understand SNC. In special residential schools SNC

have less chance to socialize with sighted children. Often all their classmates and school friends are also SNC, when they finish school, they may not have either the skills, experience, or confidence to live and work in world.

4. Often children have difficulty transferring knowledge they have learned in a special school to their home areas. One child might learn to use a cane to travel independently at the special school but will not be able to use the cane in his home area. This may happen because the child might not be familiar with the area or because his parent will not let him travel independently because of their fear that a blind child cannot safely travel alone. This is less of a problem in an integrated programme because the child is being trained in his home area. He does not have to make this transfer of knowledge. Also, as the parents watch the child be trained by the special education teacher, they will be able to form a more realistic picture of what the child is able to do on his own.

We have reviewed some of the advantages and disadvantages of both special schools and integrated education programmes. It is important to be aware of these advantages and disadvantages because if you work in one of these types of programmes, you need to make a special effort as a teacher to overcome disadvantages of that type of programme. For example, if you work in a special school, you should be aware that it is more difficult for blind and low vision children to socialize with sighted children. You need to make special effort to reduce this disadvantage of special school programmes by finding ways to allow your children the opportunity to socialize with sighted or non-disabled children. Or if you are working in an integrated

education programme, you have to be willing to find time either before or after school and either at school or at the child's home to teach the extra areas that the child needs but which are not in the school curriculum.

Although we have mentioned the advantages and disadvantages, you should be aware that neither system provides a better quality of education than the other. Both systems, if run well, will provide quality education, quality of education depends more on trained teachers, teachers accountability, administrators, availability of materials, books and so forth than whether the programme is either in special school or is an integrated programme in a regular school.

When disabled children are placed into one programme that does not mean that they have to stay in that programme for all the years they attend school. Some children may need a lot of special help for the first two or three years of their education and less help in the latter years. Their needs might best be served by starting their education in a special school and eventually returning home and finish their education by attending integrated education programmes. For other children the reverse might be true. The decision of which type of education programme is best for a child might change as the child's needs change.

Educational Integration

Many researchers have referred to the structure of integration yet Soder's (1981 a) proposal has been widely supported and accepted. Soder distinguished among different forms of integration – physical, functional, social and societal.

Physical integration implies a reduction in

the physical distance between non-disabled with disabled and is used to describe the location of premise in relation to those of the general school. Functional integration describes the functional distance between the two groups and is concerned with the common use of facilities and resources. Three forms are distinguished: Joint utilization, Simultaneous utilization and Cooperation. Social integration describes the contacts between disabled with non-disabled and others and the former can be said to be socially integrated insofar as they have regular and spontaneous contact with the non-disabled and regard themselves and are regarded as natural part of the community. Societal integration implies that, as adults, disabled with non-disabled have the same access to resources as other people, the same opportunities for influencing their own living situations and access to a productive role in the community. (Soder, 1981a, P 100).

We refer to the process of integration in the field of education as educational integration in this article. This concept can be very complex, because categories of special need children are diverse, and there is also a diversity of provision for children with special needs (day special schools, boarding special schools, special class in regular schools, support teaching in regular classes, schools in the hospitals and schools in other institutions). Moreover, the complexity concerning educational integration seems to relate with the socio-economic situation and changes within a given society, as well as with the particular ideological and political dimensions in each country.

Educational integration in schools can generally be classified by three categories: (1) exchange education between schools; (2) group integrated education in regular schools; and (3) individual integrated education in regular schools.

(See figure 2).

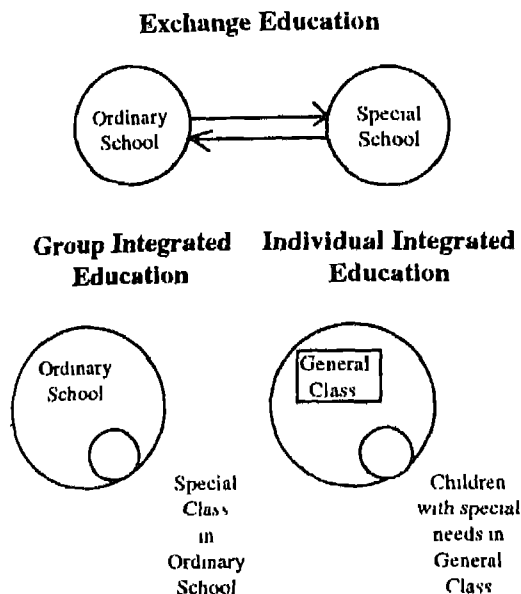


Fig-2 Three categories of educational integration

Exchange education between schools means exchange of-and shared participation in particular learning activities and extra curriculum activities between a regular school and a special school. Group integrated education in regular schools means that children with special needs have their own group or class in regular schools. Individual integrated education in regular schools means that a child with special needs attends and participate in regular classes.

Categories of educational integration depend on educational and/or integration policies in each particular country. We have distinguished these three general categories from information and knowledge gained from a review of literature as well as from our own personal experiences. There are of course many variations of these categories, for example, individual inte-

grated education in regular schools has at least two general types, with or without support teachers and services. Overall, it is important to note that the real situation and quality of education is very different between countries and between individual schools.

Effective educational integration requires the support of additional staff and pull out options such as resource rooms. Additionally, it is recognised that a lower teacher-student ratio is necessary in the integrated classroom as the emphasis on individual educational plans (IEP) require more time. For some integration and mainstreaming is seen as an option to cut costs.

One of the biggest obstacles to educational integration remains at the ideological level. As Friedler and Simpson (1987) have suggested, successful integration depends on the altering of attitudes towards individual with special needs for educators: this will mean developing strategies and activities that will help students in regular education, understand and accept their peers who have special needs. In the community this will mean accepting child with special needs as being capable of integrated living, worthy of meaningful employment, and deserving to fulfilling leisure activities. For attitude to change will require first the increasing presence of children with special needs in our schools, communities, workplaces and in the media, giving them the chance to participate fully they will, to the best of their ability. Hopefully reforms here will lead people to change their pity and remorse to acceptance.

Discussion

Today, the idea of integration reaches to many of the schools, social and education services for children, the elderly, persons with special needs and others who require special

assistance. The idea is similar to the basis of democracy, solidarity and egalitarianism. It should be promoted by economic, social security, equality of living conditions and active participation in community life

Reform for persons with special needs is a most pressing issue. Along with the poorly educated or otherwise disadvantaged segments of a population, persons with special needs have become a part of large underclass. Further considering the problems with and misappropriate use of labels, as concerns categories of special needs conditions, it becomes apparent that the process of identification and labeling needs to be reformed. Several groups have put forth the concept of "Rights Without Labels", which implies the desirability to conduct programmes and to serve children who have special needs without labeling them or removing them from regular education programmes.

Some researchers and planners believe that a unified school system would be more efficient and cost effective than operating two systems, but the basis for reform comes from the inherent and inevitable failure of the present arrangement and the expanded potential that a new integrated system has for viewing students with special needs conditions in a fundamentally different way. (Lipsky & Gartner, 1987, P.71).

Figure 3 depicts the actors involved in educational integration in the school and classroom. This figure emphasizes the importance of the interactions between the various actors, and stresses the need to conceptualize educational integration within a larger framework. At the classroom level, the integration process and changes are shaped and maintained by the im-

mediate educational system, and by the society at large. They interact education for children with special needs, if we consider the philosophy of integration, and adhere to the notion of educational integration, their teachers, support staff and peers.

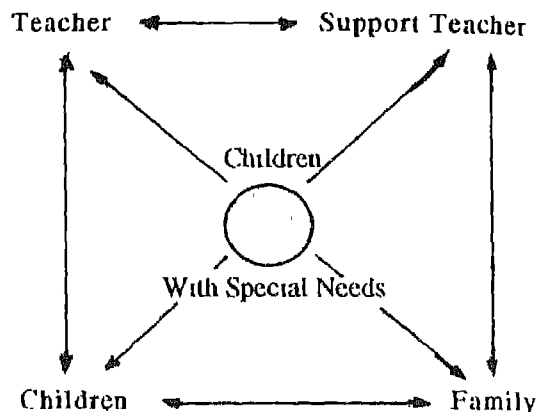


Fig. 3: Educational Integration in the School and Classroom: Actors and Interaction

An individualized educational plan should be drawn up based upon his interaction, and including input from the family. When considering placement of a child with special needs, it is important to attempt to place the child in the "Least Restrictive Environment" possible. For some persons this may still mean an institutional setting, but most children with special needs, if they are given special support, assistance and acceptance, can function and learn in the mainstream society, and we along with other proponents of educational integration believe this will lead to a higher quality of life for the individuals concerned.

Multiple Khanda Play

Prepared by : Shri Prabhakar Pattanaik, Headmaster, Subudhidevi Primary School, Berhampur
(Gm.) Orissa.

Materials Required : Two pieces of measuring 7 cm. One piece of drawing paper measuring 50x35 mm Small Balce or Tamarind seeds. One rickshaw spokes. One old tap bottom of a wrist watch One aluminium plate and some paints.

1	2	3	4	5	6	7	8	9	10	11	12
1	2	3	4	5	6	7	8	9	10	11	12
2	4	6	8	10	12	14	16	18	20	22	24
3	6	9	12	15	18	21	24	27	30	33	36
4	8	12	16	20	24	28	32	36	40	44	48
5	10	15	20	25	30	35	40	45	50	55	60
6	12	18	24	30	36	42	48	54	60	66	72
7	14	21	28	35	42	49	56	63	70	77	84
8	16	24	32	40	48	56	64	72	80	88	96
9	18	27	36	45	54	63	72	81	90	99	108
10	20	30	40	50	60	70	80	90	100	110	120
11	22	33	44	55	66	77	88	99	110	121	132
12	24	36	48	60	72	84	96	108	120	132	144

Method of Preparation

Two pieces of wood to be prepared round alike a cylinder measuring $2\frac{1}{2}$ " length and 1" diameter. Both cylinders should be prepared in equal size, 12 flats and the flats be painted by different colours. The flats of one piece of wood be numbered 1 to 12. The flats of others wood be painted with dots or rounds in different colours from 1 to 12 just like *Pasakathi*.

The drawing sheet measuring 50x35 cm should be divided by dark line using pen and to form 156 boxes (12x13) as illustrated above. The first line contained 12 boxes will be little more in size than the other boxes. These 12 boxes should be divided in two parts joining by a crossed line and each box will be numbered from 1 to 12 on the upper part of the box. The lower part of the box will contain dots 1 to 12. The rest of 144 boxes will be numbered from 1 to 12, 2 to 24, 3 to 36 and upto 12 to 144 in the manner as illustrated above and each number be joined with a pen's line of different colours.

Play Methods

This can be played for two or more students. At the beginning, drawing sheet (Play Pali) is to be spread on a flat table or on the floor, one student will have two pieces of cylindrical wood piece in two hands each and be allowed to roll on the floor or table. A particular number of one piece of wood and the dots contain of another piece of wood will be visible. For example if the number is 5 in one stick and four dots the multiplication system i.e. $5 \times 4 = 20$ comes to the mind of child. Another boy or student with ball of indication stick will come down to the line of box number-5 and dots 4 which arrive at 20. And the first boy will give 20 small balse or tamarind seeds, and like this the process will be repeated so that multiplication addition, etc. can be strengthened in the mind of the students by play way and which creates attraction, attention in the learning process of arithmetics.

This is very cheap, easy to prepare. This toy is primarily prepared for Class-III of arithmetics book multiple chart. This process can be written in regional languages.

SCIENCE RELATED VALUES

Curiosity, quest for knowledge, objectivity, honesty and truthfulness, courage to question, systematic reasoning, acceptance after proof/verification, open-mindedness, search for perfection and team spirit are some of the basic values related to science. The processes of science, which help in searching the truth about nature and its phenomena are characterised by these values. Science aims at explaining things and events. Therefore to learn and practise science :

- * Be inquisitive about things and events around you.
- * Have the courage to question beliefs and practices.
- * Ask 'what', 'how' and 'why' and find your answers by critically observing, experimenting, consulting, discussing and reasoning.
- * Record honestly your observations and experimental results in your laboratory or outside it.
- * Repeat experiments carefully and systematically if required, but do not manipulate your results under any circumstance.
- * Be guided by facts, reasons and logic. Do not be biased in one way or the other.
- * Aspire to make new discoveries and inventions by sustained and dedicated work.



GANDHIJI'S TALISMAN

“I will give you a talisman. Whenever you are in doubt or when the self becomes too much with you, apply the following test :

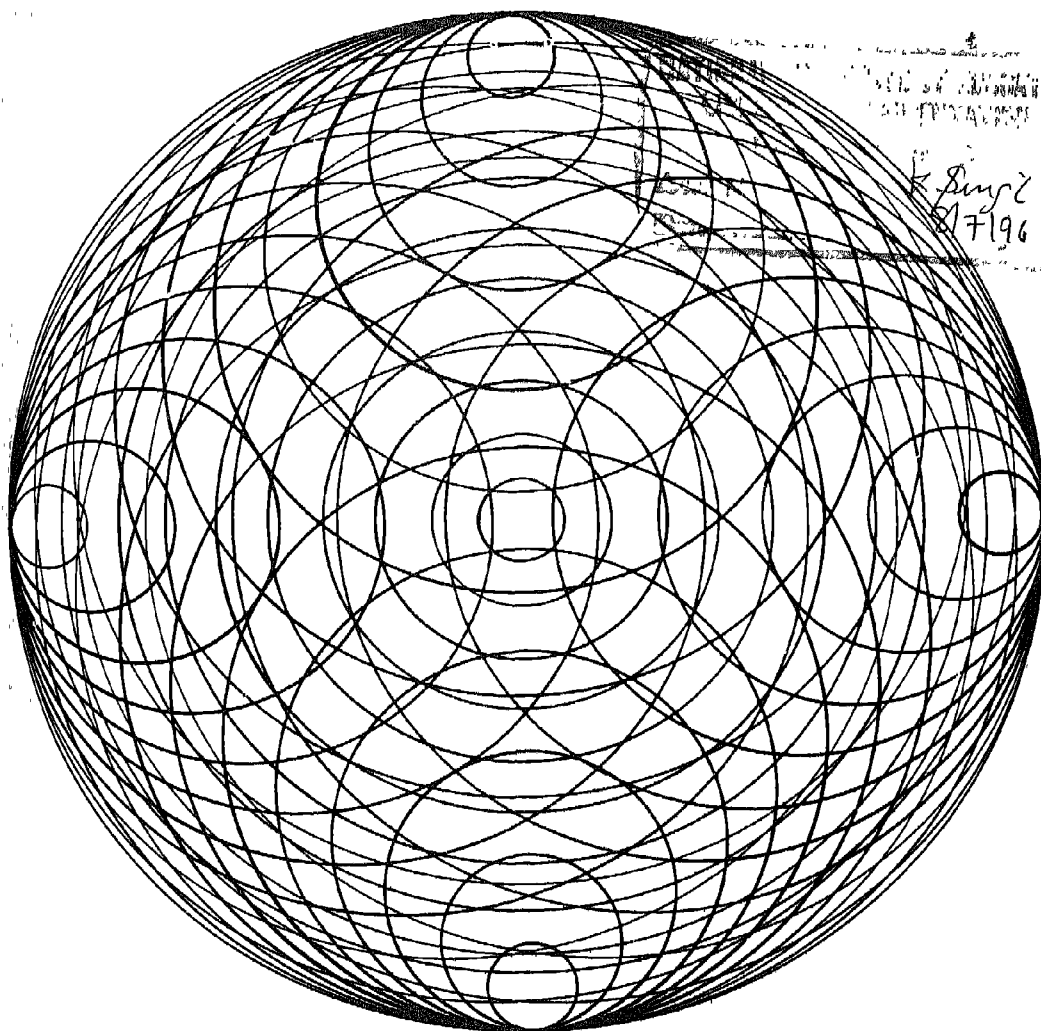
Recall the face of the poorest and the weakest man whom you may have seen and ask yourself if the step you contemplate is going to be of any use to him. Will he gain anything by it ? Will it restore him to a control over his own life and destiny ? In other words, will it lead to Swaraj for the hungry and spiritually starving millions ?

Then you will find your doubts and your self melting away.”

M.K. Gandhi

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The Primary Teacher is a quarterly brought out by the National Council of Educational Research and Training (NCERT), New Delhi. The Journal intends to give the practising teachers and concerned administrators, authentic information about the educational policies being decided on and pursued at the Central level. It aims at giving meaningful and relevant material for direct use in the classroom. It would carry announcements of programmes, courses of study, etc. offered at various centres in India from time to time. It also provides a forum for the discussion of contemporary issues in the field of education.

The major features of the Primary Teacher are

1. Educational policies concerning primary education
2. Questions and answers
3. States round-up
4. Illustrated material for classroom use

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Editorial

During ancient times we had '*Gurukula Ashramas*' where the teacher (*Guru*) taught his students through stories, real life situations and co-curricular activities. Thus a close interaction and inter-relationship was established between the teacher and the taught. Today's educationists have again and again emphasised on this point that teaching-learning process takes place effectively in a cordial and joyful atmosphere. For this the teacher has to utilise his/her creativity and imagination. The classroom activities should be so designed as to reflect the real life experience. Then the students can be more actively involved in such activities. In the article '*Early Childhood Social Studies*' the author has given a particular example of teaching-learning activities in social study where he argued that if proper care in planning classroom activities is given with various locally available materials, it will not only stimulate the interest of the child in learning but also the child will enjoy each moment of it.

Active involvement of a child in such activities helps him/her to remain alert and sensitive to the learning situations. This will also help in the proper growth and development of the child. In the article '*Simple Activities to Stimulate Thinking*' the author lays emphasis on the fact that the teacher can induce dynamism in the young child's thinking by stimulation. For effective transaction of classroom activities the teacher must be clear about the concept he/she wants the child to learn. The ideas should be organised and systematised. At times the children could also present some original ideas which should be encouraged. In all these processes, the teacher plays a vital role. A note of encouragement, a gentle touch, a sense of achievement and a feeling of oneness while solving a problem works wonderfully in making teaching-learning attractive and interesting. The child learns from experience most attentively and retention is very strong. In the article '*Teacher as a Guide*' the author has beautifully presented the teacher as a travel agent who takes the students in a trip through the lesson and as the trip comes to an end the content covered is learnt most effectively and the students learn it. This develops an eagerness in the learner to learn more and more in future. In the article entitled '*Total Literacy in the Context of Education for All by 2000 A.D.*', authors have analysed the programmes of National Literacy Mission and the target achieved so far.

(ii)

According to the authors, one of the important impediments has been runaway population growth. Suggested plan of action has been given by the authors which highlights the needs for pooling of resources, future projected need, strategy etc. Different actions for remote hilly region and urban areas have also been suggested.

Total literacy can only be achieved if it could be through proper planning and co-ordination. In the article 'Early Childhood Care and Education' the author has argued that proper development and school readiness of the child could be attempted through care and attention in the early childhood stage. The teacher should be adequately trained and informed. By this they could act as better resource of the society in future. In the article 'Education of Disabled Children', the author puts her concern that the teachers must be careful in teaching disabled students also. While the weaknesses of a disabled child could be remediated, strong points of a disabled child need to be emphasised. A trained educator can recognise the needs as well as assets of these children and can use it purposively in solving the problems faced by them. For such reasons and many more teacher's orientation programmes have been carried out still there are certain lacunas. In the article 'Training the Trainers', the author has put certain practical problems of teacher training programmes, especially the need for orientation of teacher educators. The trainers need to be more friendly and cooperative. They should also be aware of latest international trends in teacher education while they could try out each teaching technique in a purely classroom situation, theorisation could be avoided. In our "Games Corner", we have D. Bhuvana's 'Guard the Farm' and 'Jumping Postman' games. The teacher could carry out similar games and activities with locally available materials.

We would welcome further suggestions from our esteemed readers.

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GANDHIJI'S TALISMAN

“I will give you a talisman. Whenever you are in doubt or when the self becomes too much with you, apply the following test :

Recall the face of the poorest and the weakest man whom you may have seen and ask yourself if the step you contemplate is going to be of any use to him. Will he gain anything by it ? Will it restore him to a control over his own life and destiny ? In other words, will it lead to Swaraj for the hungry and spiritually starving millions ?

Then you will find your doubts and your self melting away.”

M.K. Gandhi

Early Childhood Social Studies

DR. MARLOW EDIGER
Northeast Missouri State University
Education Division, Kirksville, MO 63501

Sensory experience forms an integral part of teaching-learning process. Various materials should be provided to stimulate interest in learning. If the children can touch and feel any real object and come to learn about it that becomes a permanent memory for them. Teaching-learning activities become more and more interesting if they are related to personal experience of the child. This way they can be actively involved. The children are also left to think and discuss among them and with the teacher. They also form questions. At the primary stage children are more curious to learn. Their interest can be inculcated by adaptation of various classroom activities with the real life experience. A research is conducted by the author who supervised a student teacher and a regular teacher in this research.

A student teacher (ST) and regular teacher (RT) supervised by the writer, a university supervisor, taught a social studies unit on farming to first grade children. The ST and RT grew up on a farm and seemingly possessed quality backgrounds information on the unit taught. They used various materials as learning opportunities to stimulate interest in learning. The ST and RT placed four large pictures on the bulletin board stressing farm animals.

The first attractive illustration showed the inside of a laying house with hens in metal cages, four to six in each cage. Pupils in the introduction of the unit asked what the hens ate. The ST and RT had brought along a small plastic sack of mash, finely ground wheat, corn,

and soybeans, among other ingredients. Each child felt the mash, commenting on its smooth feeling. A few liked the aroma of the mash. The ST pointed to the beaks of laying hens so that pupils realized feed for laying hens had to be ground in very small particles to eat.

Learners were surprised to learn that hens have no teeth as we know them. They were shown a picture of a gizzard of a chicken to understand that they have no stomachs. The ST explained that small pieces of rock, like oyster shell, are available for hens to eat; the oyster shell helps to grind the fine particles of mash which is mixed with different liquids to aid digestion. Furthermore, the oyster shell also is used by the laying hen to form the shells of

eggs The ST and RT soon realized that with many explanations, concrete materials must be used in teaching-learning situations. When discussing with the university supervisor at the end of the lesson presentation, the ST and RT realized that many real objects must be used in teaching so that pupils understand what is taught Thus, children need opportunities to touch and use as many senses as possible to attach meaning to the concept of oyster shell The latter item was brought the next day to school by the ST.

A child asked if the gizzard of the laying hen was the same as gizzards that are bought in stores for frying and eating This was a good question since the learner was relating personal experiences to what the ST was teaching. Another pupil asked why hens do not fly while most birds do This led to a discussion of laying hens interacting with human beings and becoming somewhat tame in the process whereas most birds see people rather rarely. One child mentioned they had a bird feeder next to their house and every day diverse birds could be observed eating grain Children seemingly could name many birds in doors such as cardinals, blue-jays, sparrows and bluebirds Pictures of these birds were placed next to the one on laying hens so that pupils could notice likenesses and differences. With active involvement, children named the characteristics of birds while the ST wrote these on the chalkboard using neat manuscript letters These youngsters were learning biology in classifying animals!

The ST and RT now obtained the attention of children to the second of the four pictures on the bulletin of farm animals. This picture showed dairy cows ready to enter a milking parlour to be milked A few pupils commented on the black and white hair on the dairy animals in the picture The ST stated that these were Holsteins with the black and white hair. A learner mentioned she had seen cows that were

yellow in colour. The ST had an encyclopaedia open to where dairy cows of diverse colours were shown. The young children liked to talk about having seen cows of different colours when driving with their parents in the rural areas

The student teacher showed pictures of cows eating grain in the milking parlour. The amount given to each cow depended upon how much milk was produced The higher the production, the more grain was allotted to the cow To provide grain for each cow, the dairy farmer set a gauge and the grain came down a small pipe automatically The ST and RT had additional pictures to show about the milking parlour One showed a pipeline milker where milk goes directly from the cow being milked by an attached milking device to the bulk milk tank. The bulk milk tank is refrigerated and cools the milk down to 40 degrees Fahrenheit in thirty minutes In the picture, learners could notice the milk moving from the dairy cow to the large storage tank, also called the bulk milk tank. One child mentioned that his father had read and looked at pictures with him from a library book showing a grandfather holding a bucket and milking the cow by hand, not machine. The ST has a library book showing the same kind of pictures The copyright of the library book was 1945 The ST mentioned that it was so over 45 years ago Pipeline milkers are recent inventions according to the ST and RT State law requires that milk produced on the farm cannot be touched by human hands and pipeline milkers take care of this problem The ST discussed with learners why milk for people should not be touched by human hands. Thus the concept of bacteria was brought in to the discussion. Surprisingly, many children in the classroom had heard of bacteria and its possible harmful effects to people. The ST read a brief news article on salmonella poisoning and its horrible effects on people. Pupils brought

up the topic of sour milk. Milk containers state the date by which it should be discarded if not consumed already. With a drawing on the chalkboard, the ST showed where the expired date for consuming the milk would be shown on a container. The writer who supervised the student and regular teacher believes that what young children have learned and can learn is underestimated. This is true especially if pupils have had previous direct experience with a product such as milk consumption.

Next, the ST and RT discussed with pupils a third picture on the bulletin board which illustrated fish being raised in a farm pond. The farmer used fish pellets to feed the fish as they came to the surface to eat each pellet. The farm pond contained many fish as they came to the surface to feed. An aquarium with small gold fish in the classroom provided further content for pupils to think about and discuss. Young children raised questions such as the following about fish:

1. Why can fish live in water whereas hens and dairy cattle must live on land to breathe air? Children were fascinated here in learning about the use of gills by fish as compared to lungs used by birds and mammals.
2. Why does the body temperature of fish become similar to the surrounding temperature whereas birds and mammals have a constant body temperature? Young children in sequence had a chance to view the fourth picture on the bulletin board placed by the ST and RT.

The fourth picture was divided into two parts. One part contained the life cycle of a frog. Pupils looked at the small insert of an egg, the tadpole, and the adult frog. The next day the ST and RT brought to class a quart jar containing very small tadpoles. As the days progressed, pupils noticed how the tadpoles

grew. Comments were made on tadpoles living in water and as a frog living on land most of the time. Here, children were surprised to learn that frogs had developed lungs which tadpoles did not have.

The second part of the fourth picture on the bulletin board had a turtle pictured. It showed turtles hatching from eggs. Pupils now concluded that hens (chickens) lay eggs and their young hatch from eggs. Fish, frogs, and turtles also lay eggs from which the young hatch came out. The ST explained that frogs and turtles have the same body temperature as do fish, all being cold-blooded. Birds and mammals have a constant body temperature and do not depend upon the environment. Body temperature was also explained by the ST. A question arose as to frogs and turtles being farm animals. The ST and RT praised pupils for raising this question as well as others. The ST stated that ponds on farms for cattle to drink water from have an ample number of tadpoles and frogs/toads as well as some turtles.

To evaluate pupil achievement in the farm unit, the ST and RT introduced and showed a filmstrip to these early primary grade pupils. Adequate time was spent on each frame so that learners could tell what they had learned about each farm animal. The first three frames showed fish. Pupils volunteered to tell what they had learned about fish. Thus pupils told about fish having gills instead of lungs, among other subject matter learned. The next four frames illustrated amphibians such as frogs and toads. Here, young learners discussed frogs and toads being born in water and hatched from eggs, as well as developing into tadpoles. These animals later acquired lungs and live on land. The next four frames in the filmstrip showed turtles and snakes, both called reptiles. Young learners here told about turtles and snakes being cold-blooded, and their babies being hatched from eggs. Four sequential illustrations in the film-

strip revealed birds. Learners were very proficient in pointing out that birds have feathers and have a constant body temperature readings. Many birds fly, however, laying hens do not fly. Their young too hatch from eggs and, like fish, frogs, and reptiles are independent from their mothers at birth.

The final part of the filmstrip had four frames devoted to mammals. Pupils discussed that which had been elaborated upon previously such as dairy cows giving milk for human consumption. To answer how the young are fed, the ST and RT showed a picture of a beef cow nursing her calf. A picture was also shown to pupils and discussed on a recently born dairy calf being fed by bucket. Here, the

young calf was fed either whole milk or skimmed milk from bucket feeding.

In Summary

Early primary pupils are curious. They desire to learn and have high energy levels for learning. Teachers need to choose interesting learning opportunities for pupils. Goal centred learning must be in evidence.

At the end of the unit, a child asked if there are any mammals that lay eggs. The ST stated that the platypus in Australia provides milk for feeding her young which are hatched from eggs. Teachers need to realize that early primary grade pupils can truly be motivated individuals to achieve, grow and develop.

Simple Activities to Stimulate Thinking

BASANTI BANERJEE

Head, Multihandicapped Unit

National Association for the Blind, New Delhi 110 022

The children at the primary level are just like clay models. They can be effectively and efficiently moulded into any shape if there is a constant interaction between the children and the teacher. The teacher can induce dynamism in the young child's thinking by stimulation. Text books are just sources of knowledge and information. But the actual teaching learning process takes place in a more cordial and jovial mood which the teacher can create through his/her imagination and interpretation. The children find it easier to cope with such a given stimuli, and it avoids fatigue, boredom and absent mindedness.

Teachers are prime forces controlling the reins of education. It therefore, becomes their prime task to enhance the child's level of thinking by stimulating them with rich experiences to make learning fun for them. They must inculcate dynamism in the young child's thinking, which will facilitate them in problem solving, decision making, evaluation and critical thinking. Learning thus automatically becomes a constant source of joy and delight, and enables the child to work with new zeal, interest and confidence. They soon realise the need to give each idea a second and alternative thought, such minds exhibit greater fluency and flexibility of ideas, which is essential in this fast developing scientific and technological world.

Ironically, it has been observed that the

textbooks, which are instruments in the hands of the teachers, are just sources of imparting knowledge and information to the students. This more often makes learning dull and monotonous, consequently children dread the sight of the school, they often tend to become aggressive and repulsive towards authority. On the other hand, if the teachers realise the importance of organising activities which will enable the students to think and response in an entertaining manner, they will look forward to learning, this will cultivate in them an awareness to think and act. Such activities will also help the teachers to elevate the young minds from a lower level to a higher and more sophisticated level of thinking. Education will thus not become a stereo type activity but a sort of

play field where the teachers and students are both interacting in a cordial and jovial mood

Most of the teachers do realise the importance of organising such activities which may stimulate thinking in the children, but the problem for them is how to procure and exhibit activities which may provide children with the opportunity to act, manipulate, observe, measure, interpret different objects and situations. They are themselves not trained in the various techniques and strategies that helps in the systematic thinking process, some of them are not even acquainted with them

The main aim of the teachers should be to first have very clear concepts of what he/she wants the students to think in relation to the content matter or situation. She should herself have a knowledge of a various techniques that can be employed in the process of thinking, this provides an organised direction and helps the students to think better and express himself coherently. These interactive strategies prove very effective and the message conveyed is better received. The students find it easier to cope with such a given stimuli, and it avoids fatigue, boredom and absent mindedness.

Now the question arises. Why to introduce other activities besides the classroom teaching? Interesting and attractive classroom activities stimulate the thinking, thereby challenging the intellect which will positively effect the learning outcome in any subject area. One great advantage of such activities is that it infuses a new vitality in the learners, they realise the need to pause and think, and thus display greater flexibility and fluency of ideas, original and innovative solution to problems and situations.

It is at the primary level that the young minds are impressionable and can be moulded easily. The teachers at this level should be well acquainted with the various thinking skills and the activities that can be done with their chil-

dren. They must have an open liberal mind to incorporate them along with the various formal classroom teaching. There is need to train the teachers and equip them with materials that will enhance the thinking of the students and help in the interesting presentation of the content. The National Policy on Education (NPE, 1986 revised 1992) has advocated "a child centred and activity based process of learning".

There is no dearth of programmes that have attempted to teach or impart thinking skills with the notion that "thinking" is a process which can be indulged in deliberating and can be directed at will. Many tools have been devised to encourage students to employ all their senses when confronted with a given problem or situation.

The stimulating thinking activities that follow are very simple/interesting and not much time consuming. These can be easily done with the children. It is essential that the children must be aware about objects, events, persons and situations around them and gradually develop an ability to identify and describe these. These activities will provide the essential directions to the teachers. It may be noted that these activities are not exhaustive and can be modified according to local variation.

Simple Activities

Objectives - To develop the concept that even though the shape of things are changed, the amount/length/number remains the same.

Activity

Students are asked to make two balls of the same size from a big ball of clay. One ball is left on the table and the shape of the other is changed to look like a bird or animal or human figure. Now ask the question. Do the two balls have the same amount of clay?

Activity

Showing two ribbons, strings, tablemats,

rag of cloth (bright coloured) rulers of the same length, the students are asked : Are the two objects of the same length ? Then one of them is rolled, and again the students are asked ' Are the two objects of the same length ?

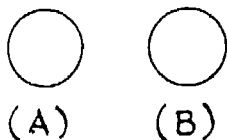
Activity

A couple of exercise books are taken from the students and spread on the teacher's desk in two rows (each row is having the same number) Then the books from one row are arranged in a pile and the students are asked if the number is still the same in both the rows ? The same activity can be done with candles, pencils, nails, tiny toys

Activity

Material Two clay balls identical in weight

Display I

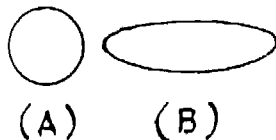


— Do both the balls have the same amount of clay ?

— Is there as much clay in (A) as in (B)?

Why do you think so?

Display II



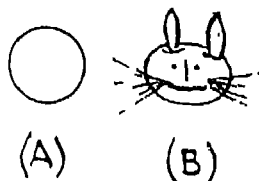
Suppose (B) is elongated

— Do both have the same amount of clay?

— Is there as much clay in (A) as in (B)?

— Why do you think so?

Display III



Suppose (B) is moulded in the shape of A bird or man or cat

— Do both have the same amount of clay?

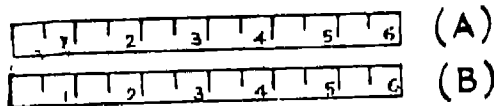
— Is there as much clay in (A) as in (B)?

— Why do you think so?

Activity 2

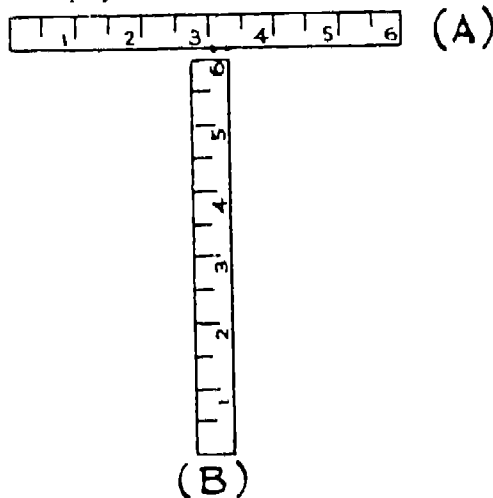
Material : Two identical rulers.

Display I



— Are both the rulers equal in length?

Display II



Changing the position of (B) .

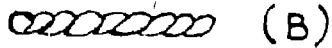
— Are both the rulers equal in length?

— Are the rulers still equal in length or

is any one of them shorter or longer than the other?

Material Two identical pieces or wires or strings

Display I



— Are both the pieces of strings equal in length?

Display II



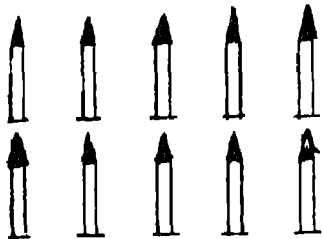
Twisting (B) :

— Are both the pieces of strings equal in length or is any one of them shorter or longer than the other?

Activity

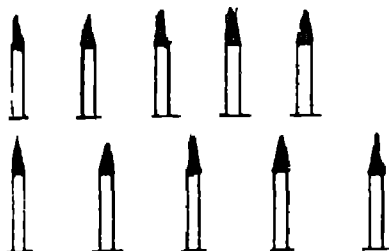
Ten candles (Pencil, Nails)

Display I



— Are there the same number of pencils in both the groups?

Display II

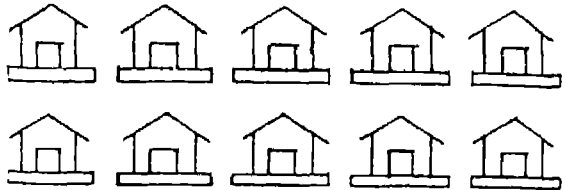


Spreading the pencils of group (B) .

— Are there the same number of pencils in both the groups?

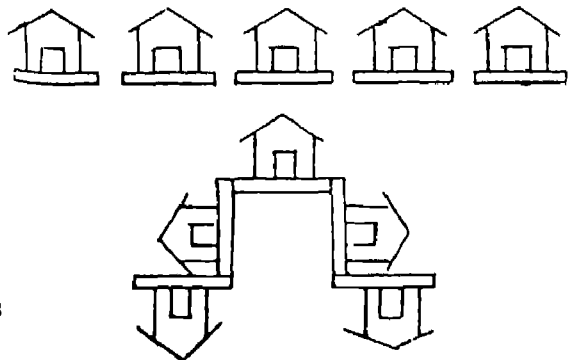
Material Ten strips of sticks with tiny house on them (Display on flannel board)

Display I



— Are there the same number of houses in both the groups?

Display II



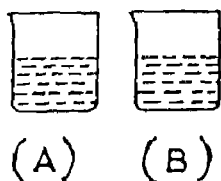
Changing the position of group (B) .

— Are there the same number of houses in both the groups?

Activity

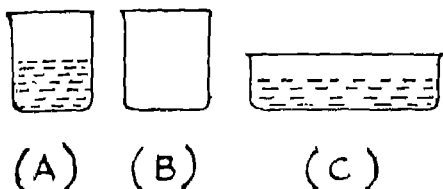
Material Two identical containers and one broad flat trough

Display I



— Do the two containers have the same amount of water?

Display II



Pouring the water of (B) in (C):

— Do the two containers (A,C) have the same amount of water?

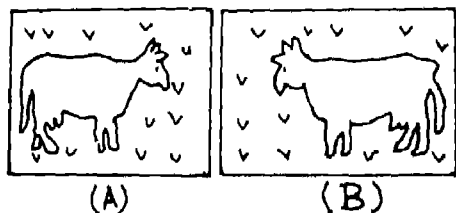
— How do you know?

Activity

Material : Two pieces of equal sized green card boards, two pieces of card boards cut in the shape of cows and six pieces of card boards cut in the shape of equal sized huts.

(Display on flannel board)

Display I



Suppose these two pieces of card boards are patches of green grass.

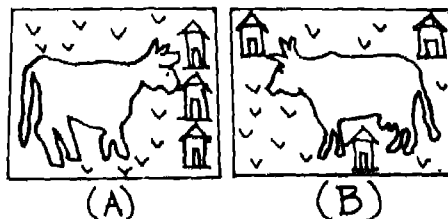
— Are both the patches of grass equal?

— Is there as much grass in (A) as in (B)?

— Will the cow in (A) get as much grass to eat as the cow in (B) ?

— How do you know?

Display II



— Are both the patches of grass equal?

— Is there as much grass in (A) as in (B)?

— Will the cow in (A) get as much grass as the cow in (B) ?

— How do you know?

Activity

Two containers, one long and narrow (e.g. a small kids water bucket or test tube) and the other flat and broad (e.g. a basin or trough) are kept on the teachers desk

A student is asked to act as a milk man (*dudh wala*), and he is instructed to pour a glass of water in each container. The students are asked if the quantity of water is the same in both the containers.

Activity

Display on the flannel board or draw on the blackboard, two identical plots of the green field. The students are asked : Is there the same amount of grass in each field ? Two identical cows and three houses are pasted or drawn in each. In one they are all placed in a row and in the other the placement is spreaded The students are asked . Is there the same amount of grass left in both the fields ?

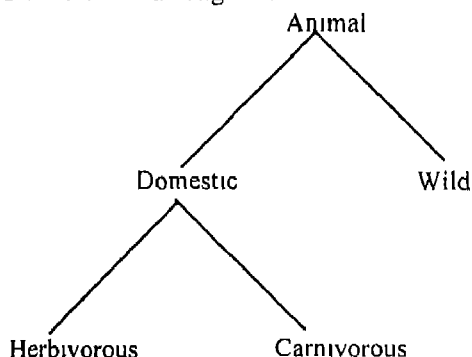
Objective : To develop the ability to form group of objects, events, persons and situations

according to a definite criteria. A group/class is formed by the union of two or more things with common characteristics.

Activity

Cut out pictures of the animals or small toy animals (e.g. cow, goats, deer, rabbits, lions, dogs, etc.) the students are taught that they belong to one class i.e. the class of animals. Next, the students are encouraged to group the animals according to sub classes, e.g. according to their mode of living - domestic animals (dogs, cats, cows, and wild animals (lions, deer, elephants). Another criteria may be according to their diet habits e.g., herbivorous animals and carnivorous animals.

Students may be given the opportunity to make a number of other types of classification with the toys or cut out pictures of animals (e.g. according to their movements - walking, crawling, jumping, climbing). The children may be encouraged to explore the similarity and differences among them.



Different collection of objects, such as pens, pencils, coloured pencils, coloured chalks, different kinds of fruits and vegetables or flowers can be displayed on the teacher's table. The students are asked to "put together things that are alike, put them there if they are different".

Students may be asked to act as shopkeepers e.g., *Sabzi wallas*, *Phool wallas* (florists)

saree wallas, *fruit wallas*. All those who are selling vegetables form one group, those selling fruits form another group, and those selling sarees from the other group.

Like wise names of the tree animals/shops/vehicles, etc. can be given to the students. Then they can be asked to form groups.

A further classification can be done of each of the groups. e.g. of the trees

Trees	Plants	Bushes
	Seasonal	Perennial
	Flowering	Fruit bearing

The complexity of the classification can be done on a higher level by attributing two, three, four or even five types of classifications.

	Colour	
	Red (A)	Blue (A')
Shape	Square (B)	- A'B
	Circle (B)	- AB

Activity

Allotting names or distributing pictures of the animals/trees/vehicles/shop articles/vegetables/ fruits etc. to the students, they may be asked to form groups, with these groups, through some more activities, further classification can be done.

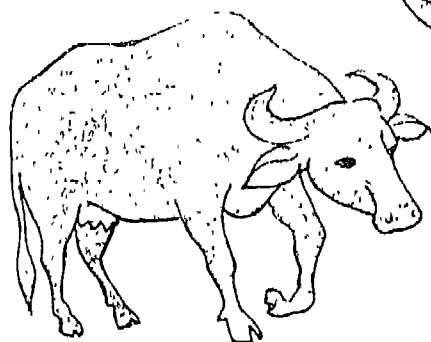
For example, in the animal group, the students can be asked to form groups according to domestic or wild (To put it in simpler form - staying in the house and staying in the forest). More groups can be formed on the basis of the answers of the following questions.

- What do they eat? (grass eater or meat eater)
- Where do they live?
- How do they call? (e.g. bark, roar, etc.)
- What are the young ones called?
- How do they move about?

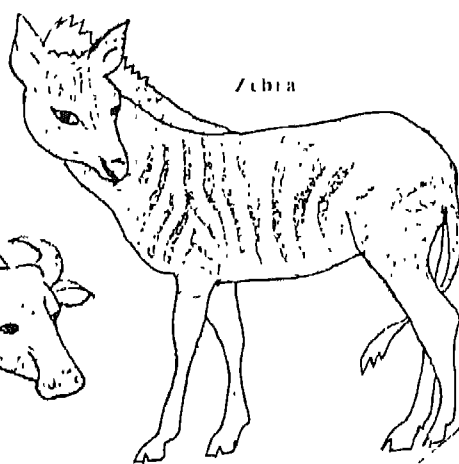
Activity

Ask children to think of any profession

Animals



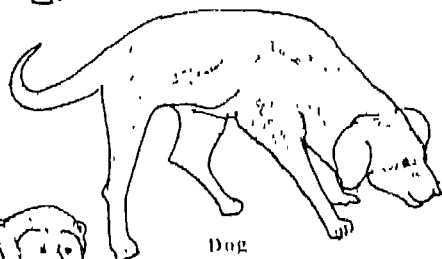
Buffalo



Zebra



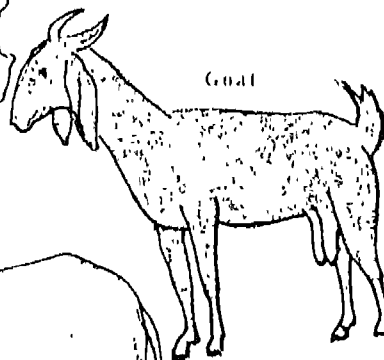
Giraffe



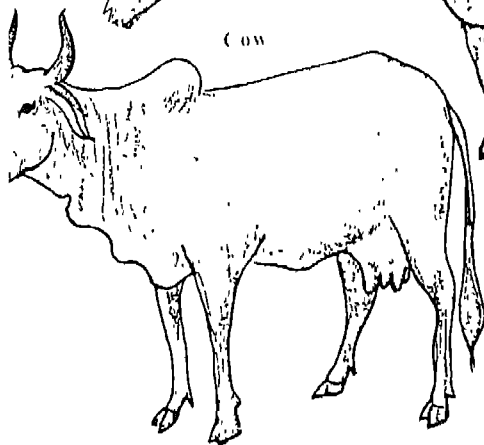
Dog



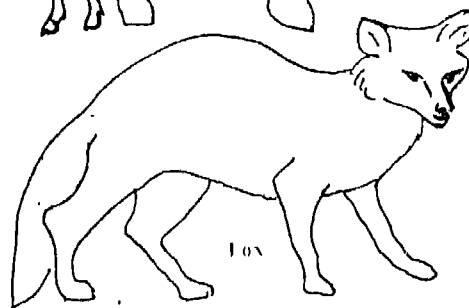
Monkey



Goat

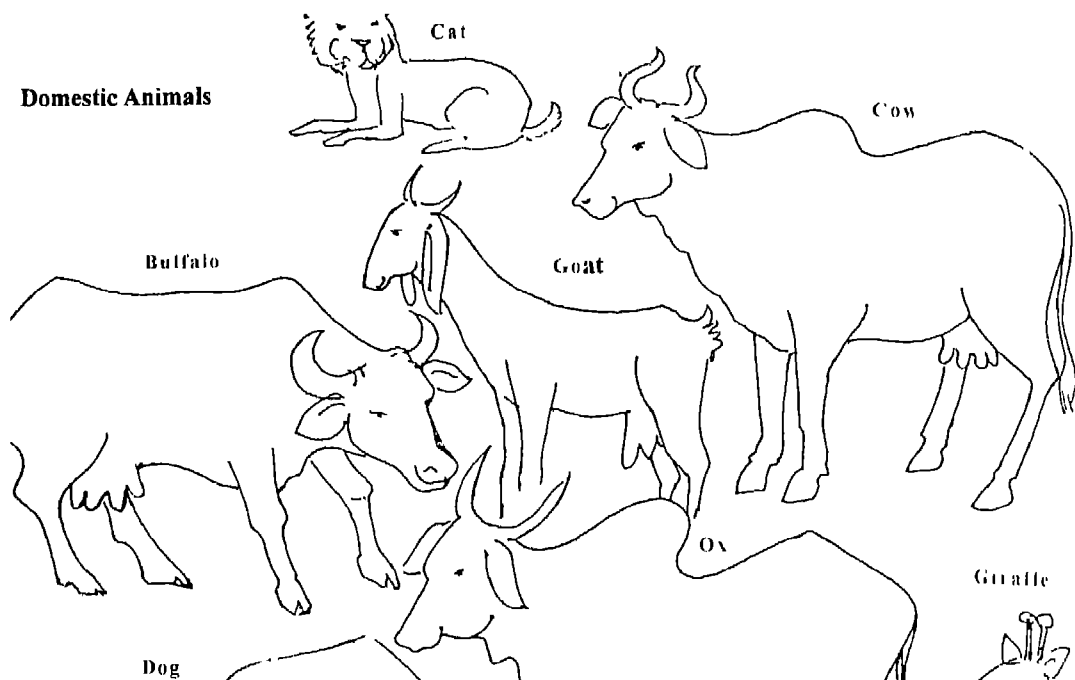


Cow

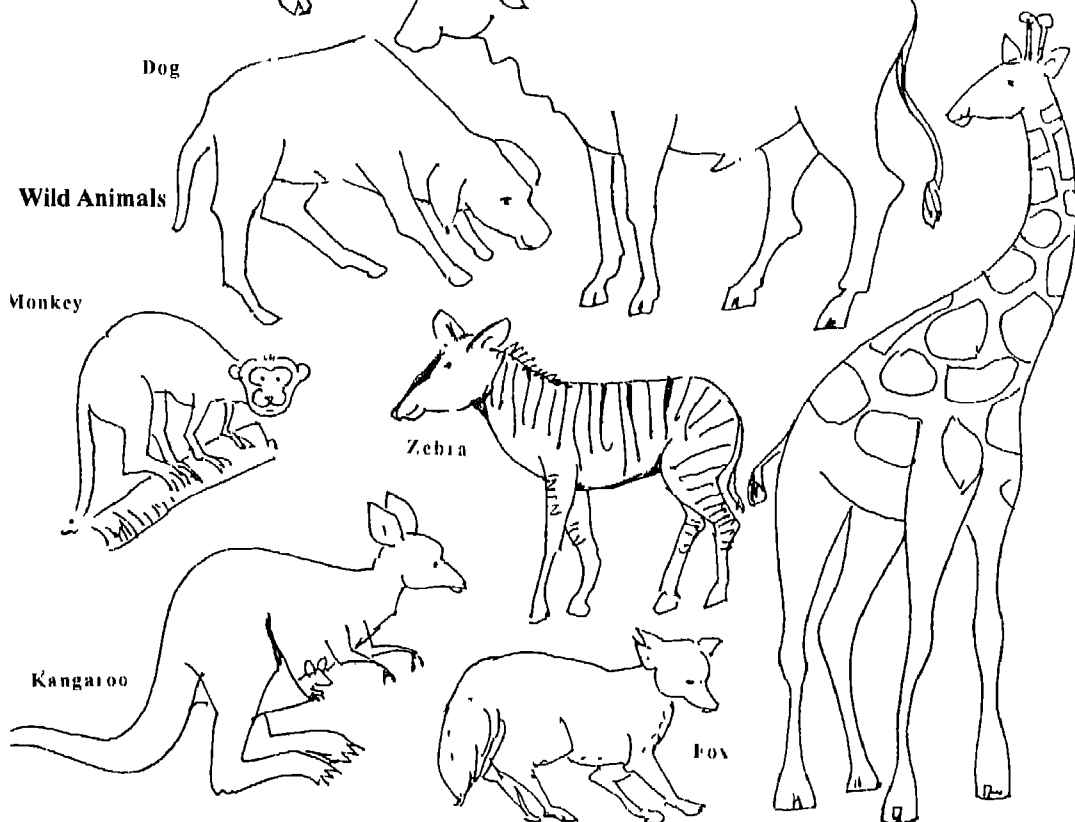


Fox

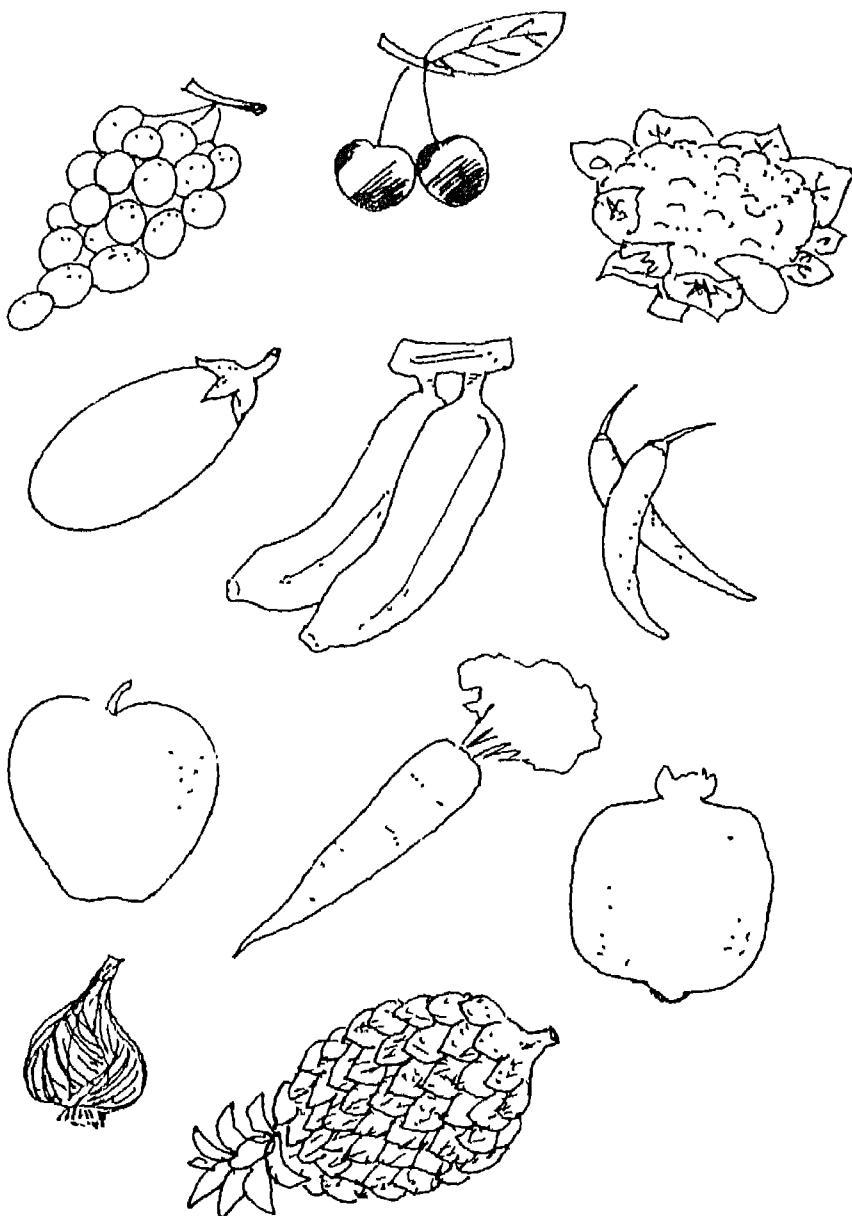
Domestic Animals



Wild Animals



Make Group from the following



Think of any profession :



(e.g. teacher, doctor, policeman, gardener, bus walla, driver etc.) The ones belonging to one profession are grouped together.

- What work do they do ?
- What dress do they wear ?
- What articles (things) do they use ?

Objective : To develop the ability to arrange objects or things according to ascending or descending order.

Activity

Students of the same height form a group. The height or age of each student is measured and the necessary correction in the position is done.

The same can be done with other objects (e.g., chalks, sticks, etc.) and the students may be asked to arrange them in ascending or descending order.

Objective : To develop the ability to think about people, objects, places, etc. and to group and organise ideas in a systematic manner according to a given set direction.

The use of POPBEANS	POPAN
P = people	P = People
O = Objects	O = Objects
P = Places	P = Places
B = Brandnames	A = Activities
E = Expressions	N = Nature
A = Activities	
N = Nature (Environment)	
S = Symbols	

Initially take up one point e.g., PEOPLE. Give the students two minutes to think of all the names starting with the letter 'B' (any

alphabet may be given). Gradually take up the other points e.g. objects, places, brandnames, etc.

Then a particular work may be taken e.g., the colour 'Red'

- What does the word 'Red' remind you
e.g. Red Riding Hood.
- What objects can be associated with 'Red'
e.g. Post Box
- What places can be related to 'Red' ?
e.g. Red Fort.
- What brandnames can be associated with 'Red' ?
e.g. Red Label Tea
- What activities does the word 'Red' remind you ?
e.g. Correction (Teacher)
- What in nature can be associated with 'Red' ?
e.g. Rose
- What symbols can be associated with 'Red' ?
e.g. Stop

This technique helps in producing ideas in a systematic and organised form. In composition this provides ideas in directions.

(Source POPBEANS and POPAN : Erhwon Thinking Programme)

Keeping the objective of each activity in mind, and according to the need and situation of the classroom, the teacher can do a variety of other similar activities. The children may also be encouraged to invent original ideas, make drawings, paintings or models.

Teacher as a Guide

· NILIMA SRIVASTAVA

T G T, Atomic Energy Central School 2
Bombay 400094

For some reason or the other our education system at times fails to attract learners and it is found that in this process teaching becomes dull, boring and monotonous. The teacher comes as a central figure in this process where he/she can make or mar the enthusiasm of a learner. Without establishing a relationship between the teacher and the learner, it is impossible to make teaching effective. Besides this the teacher should have a clear concept of what is to be taught. It would enable him/her to move from basic to latest with appropriate steps. If a friendly attitude is shown and commonness of purpose is established then the child learns from experiences most attentively and the retention is very noteworthy.

Our education system appears today to be trapped in a vicious circle. The cause of the existing factors appears to lie on a secondary factor and the secondary factor cause in turn lies in the next factor and as we continue, we finally end up to the place from where we started and the output is zero. The following article attempts to throw light on certain factors by comparing the 'teacher guide' with the 'travel agent' who also acts as a guide and helps the ignorant traveller in undertaking the journey.

The client enters the travel agents office. The office is beautifully decorated with beautiful souvenirs, journals, pamphlets, brochures and pictures of different places. The travel agent has a ready smile and looks alert and

enthusiastic. The client is very much attracted to the set up and the person and there is no difficulty in making a link between the transmitter and the receiver.

Once the interrelation is set up the interaction begins. Now the client has his own apprehensions, fears and doubts about the trip because of the previous experiences. The child also has his own fear due to the previous experiences or the background from which he is coming. A successful teacher is like the travel agent who takes care of all the above factors and is still able to encourage the child to undertake the trip by giving the correct information about time resource limits, safety aspects and the instruments that can be affectively used

during the trip (Pic. 3)

The travel agent on the guide should have a thorough knowledge of all the places to be visited and he should be aware of all the important spots that the client should not miss during the trip. The teacher should also have a broad knowledge base and should know right from basics to the latest data in the related topic.

He should be able to steer the child successfully from basics to latest with the help of appropriate steps as experiments, comparative study, puzzles, projects who further reinforce the knowledge transmitted (Pic 4)

Sometimes the transmitter is as much pre-occupied with the process of transmitting that a very important factor 'humour' is completely forgotten. There is a close relation between the 'Ha Ha' and 'Aha'. The happy moments establish a strong union between the teacher and the taught. A friendly atmosphere is established and many problems which couldn't be handled by sympathy alone are solved within no time. How many of us are able to forget the guide who did not talk in a monotonous tone, but, his talk was full of jokes, anecdotes and unusual happenings. Nobody is able to sleep through a comedians monologue and the exhibitions disappear in no time. The happy moments are the one during which the children are most attentive and the retention is very strong. So children should be encouraged to compose their own riddles, jokes and collect funny incidents and unusual happening related to the texts. Humour is no substitute for content but it acts as a doorway (Pic 5)

Now, how many of us have forgotten the guides who have taken the care to personally straighten our seats or adjust the seat belts. The encouraging note, the warm smile and the soft touch act as catalysts during the learning process. During the school days, I fondly remember one teacher who would come to my place

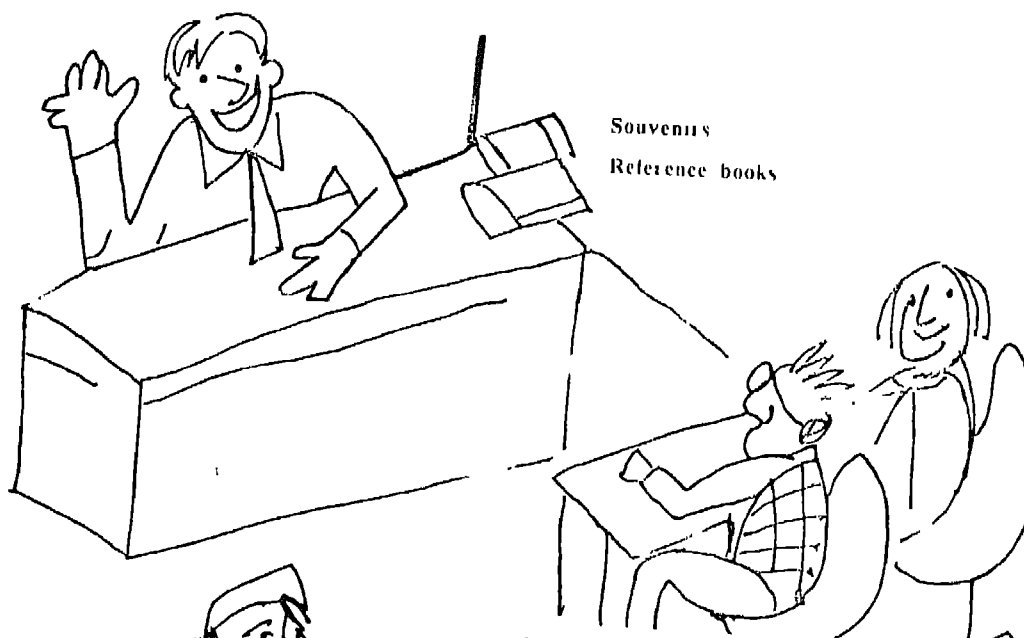
and when I was slow with the work would whisper quietly you alone can do it'. I was so thrilled by the whole process that within no time I was the fastest to finish the work in class. Later I came to know that she whispered the same things to many in the class but I remember that it worked as magic for me.

During the trips people like to travel with friends. Rarely we would find a lone wanderer and if asked about his wish, he would say 'I wish they were also here'. Similarly children work most effectively when they are in groups. During the group activities there is a strong sense of belongingness, commitment and a strong urge to arrive at the result. How many of us have still not forgotten the radiant excited faces and the echoing voices 'Teacher we could do it' (Pic 6)

Sometimes during large bookings it might happen that certain clients would have already visited one or two places. The teacher also finds that certain students have already explored a topic. The skillful travel agent can build an individual expertise by encouraging them to undertake some tour responsibilities or give some interesting suggestions. Similarly in a class, the children of this category can be allowed to undertake extra responsibilities so that their interests remain alive.

Our sketchbooks and the diaries containing the account of the tour still remain our proud possessions. The children should also be encouraged to maintain scrapbooks, draw sketches and maintain a project report of their work. The children's imagination and their creativity abilities get an outlet by these activities and the results are just astonishing and wonderful.

The travel agent or guide has to be prepared for both sides of the picture. He may get frantic phone call for assistance or happy post-cards stating that "—The trip was different, I did not know when I walked out of my shell and



Pic. 3

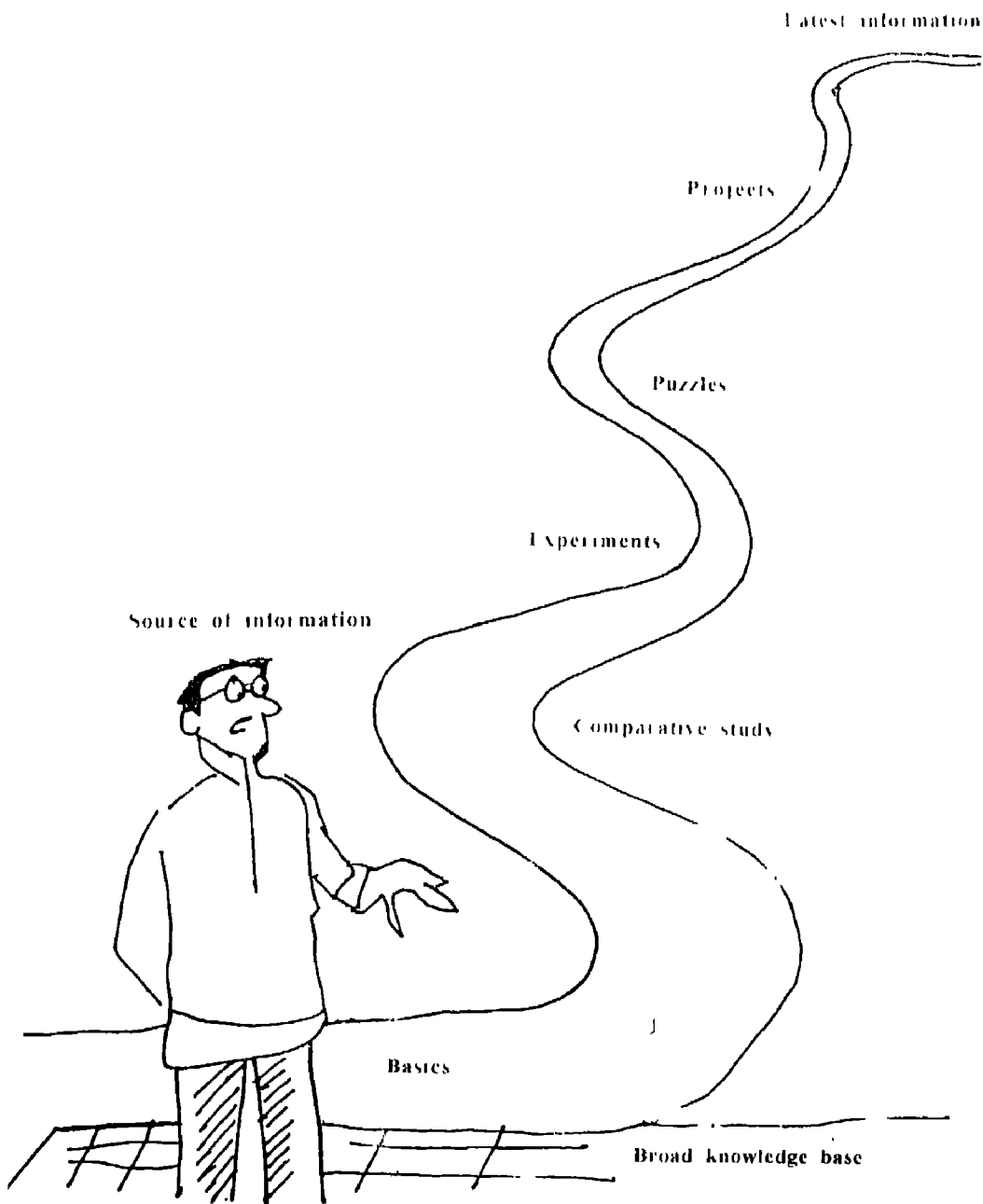


Time
Resource limits
Safety aspects
Instruments

Apprehension
Fears
Doubts
Background



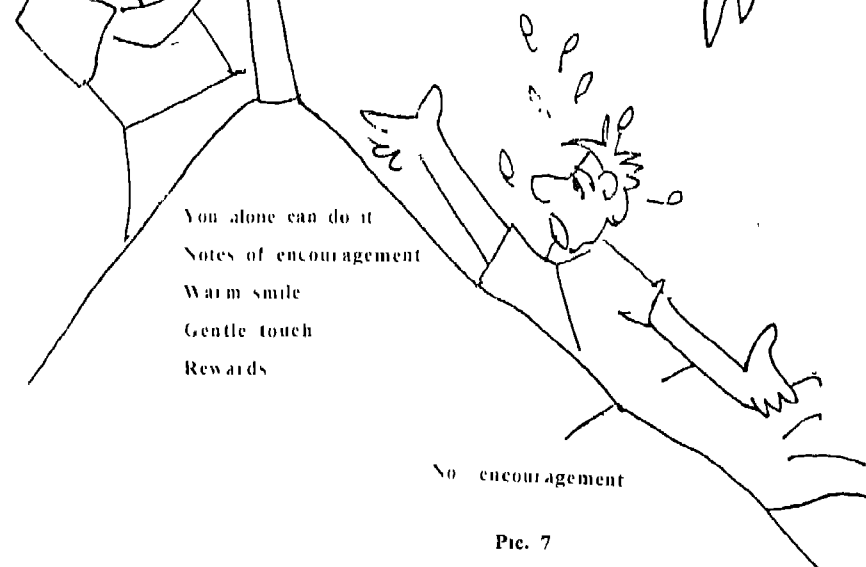
Pic. 4



Pic. 5



Pic. 6



Pic. 7

GROUP ACTIVITIES



PIC. 8

was actively involved neck deep in activities. I was so engrossed in visiting places that I didn't realise that the trip came to an end and then it was really very sad"

"I didn't know that I could draw so beautifully and I had no friends till the groups involved me as a active member and did not leave me". (Pic. 7)

But one thing was certain that this was not the end of the trip but a beautiful beginning. The travel agent had booked the client forever. He was told that not only this trip but many more in near future will be there and they will

be more thrilling and exciting than the earlier ones. The element had entered the reaction and was set to attack and interact with many 'unknowns'. It was like a chain reaction releasing energy at each step for further action (Pic. 8)

This 'open ended' approach provides the light to the traveller or the child and he can continue with his endless trip of more and more explorations and adventure. The light remains alive and vibrant in the young heart and minds and sets them on the path leading to successful and unique travellers of future.

Total Literacy in the Context of Education for All by 2000 A.D.

S P AHLUWALIA

S. BEENA

INFOL - CSSR , Sector 8 Bhilai

Literacy is an essential instrument for national and individual development. India, a third world country, despite of active and alert programmes of National Literacy Mission, has a slow and sluggish improvement in literacy rate. It, to be precise, rises at a snails pace compared to the yearly exponential growth of population. The hassels are multi-dimensional and varied. From religious constraints to cultural bottlenecks to gender discrimination are evident in the literacy rate of women (39.42%) as compared to men (63.86% - 1991 Census). The need of the hour is to devise and develop a new perspective for remote / hilly regions with scattered population, urban and rural areas.

It is universally recognised that literacy is an essential instrument for the development of any country. The Universal Declaration of Human Rights, 1954, unequivocally pinpoints that "everyone has a right to education". Oddly enough, even after forty years of signing this historic declaration, the challenge of illiteracy and absence of basic education still plague and puzzle the nation. According to 1981 Census, the literacy rate in India was 36% which moved on to 52.11% in 1991. But the dream of total literacy by 2000 A.D. still seems not only elusive and evasive but also distant and difficult.

Education involves all-round development of human personality bringing out the best in a man. It equips learners to develop their com-

petence and skills to meet challenges of life. Literacy is a key through which the doors of education can be opened. It helps in generating, conveying and developing ideas and thoughts over time and space. It has immense potential to understand the various dimensions of human "mind". It inter-relates the individual with his ecological, environmental (Physical, Biological and Social) and even with his psychological existence. This all includes the cultural, economic and organisational aspects of life. It is an instrument for knowing, developing and using that information by the learner. Now, the question which raises interest and demands attention is - Who is a literate person? A person is deemed as literate if he or she can

read, write and count with understanding in any language. One who can read but cannot write is not a literate person.

During the past three decades, the population of India has been increasing at the exponential rate of more than 2% per annum. It has gone up from 361 million in 1951 to 844 million by 1991. At this rate, it may cross the one thousand million mark by 2000 A.D. Strangely enough, increasing educational facilities have not been able to keep pace with the growing population. It has been observed that when the population grew at 23.5% in 1981-91, the number of literates grew by 47.5% and illiterates by 9.8% over the decade. If there is no change in the rate of growth of population and the state of spread of literacy, there would be five hundred million illiterates in India in the year 2000 A.D. This means 500 million individuals will be in the queue without any basic literacy skills and will not be able to use their right to learn and know. Table - 1 shows the growth in the number of literates and illiterates during the years 1951 to 1991.

TABLE 1
Growth in the Number of Literates and Illiterates

Year	Literates (in million)	Illiterates (in Million)
1951	5.7	174
1961	10.7	107
1971	161.2	210

An examination of Table- 1 depicts clearly how the efforts to narrow down the gap between literates and illiterates have given positive results. It also generates a hope that the war can be fought and perhaps can be won through careful and cautious efforts.

But due to the socio-religious, political and cultural constraints there is a very wide range of inequality in the divergent culture of India. Attitude and perspective vary according

to sex differences. India is a male-dominated and patriarchal society, hence it has a highly stereo-type outlook towards women and their education. The rate of literacy among women is 39.42% whereas male literacy rate is 63.86% (1991 Census excluding J & K).

Literacy makes them functionally aware of their ecological, social economic and political environment. It removes poverty, inequality, backwardness and produces profitable income-generating schemes. It controls population, child per woman awareness towards family planning, helps in decreasing mortality rate and raises the sex ratio of women.

Suggested Action Plan

The need of the hour is to critically evaluate the implemented approaches and the resources pooled for the programmes of National Literacy Mission. The validity and credibility lies in the justification of what has been already done. Those states which are moving faster in literacy standards also are facing relapse of illiteracy due to the lack of ineffective programme of post-literacy. The another area of concern is that it should be clear to all those who are involved in the programme that what is important is not the declaration, but acquisition of functional literacy skills on the part of learners. The areas of importance are ..

- Pooling of resources,
- Future requirements of literacy programme;
- Strategy of future programmes,
- Role of various organisations/communities/institutions/ individuals and
- Methods to spread literacy.

Suggested Action Strategy

Under the identified National Literacy Mission Programme at district, the blocks with specified geographical location and demographic population should be chosen. A few

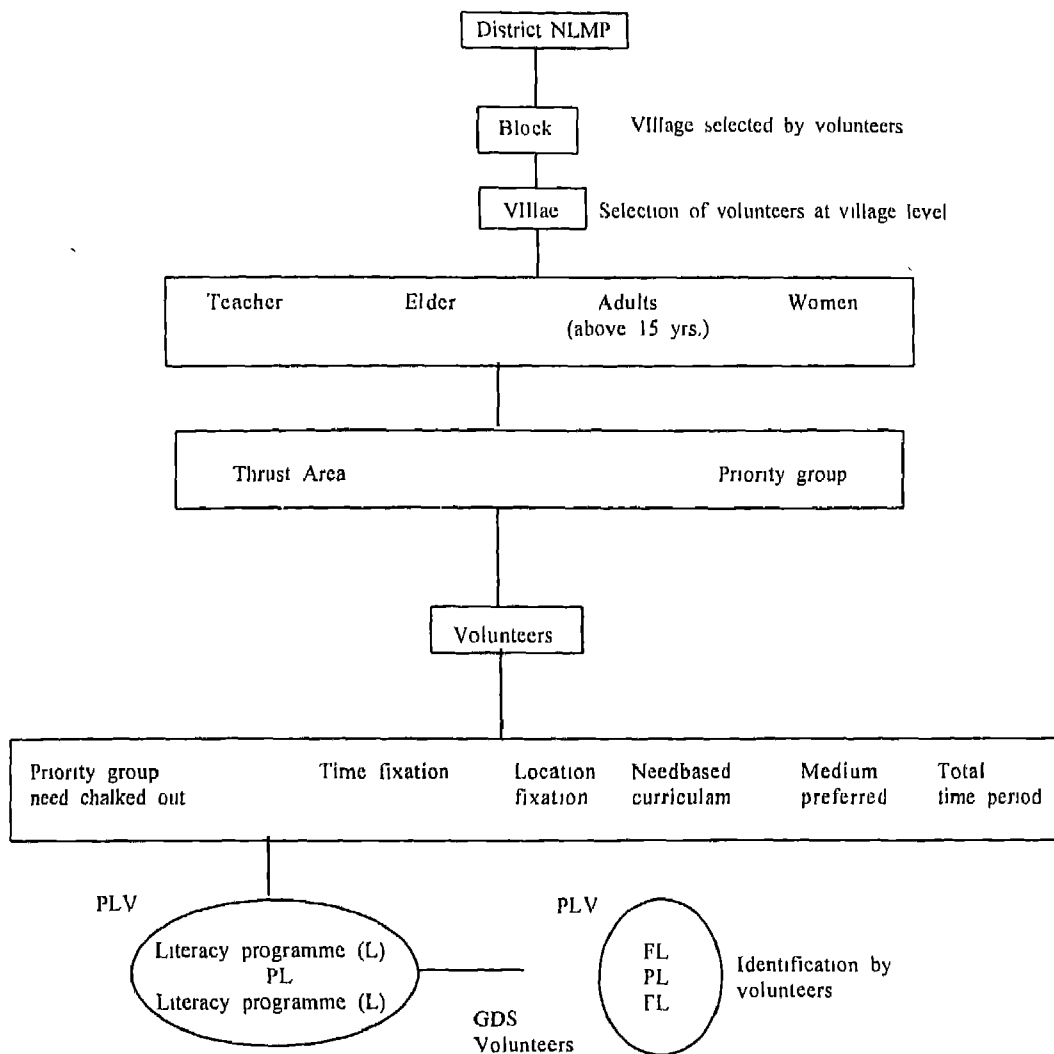


Fig.1

- L* - *Literacy*
- FL* - *Funltional Literacy*
- PL* - *Priority Learners*
- GDS* - *Government Development staff*
- PLV* - *Potential Learner volunteers*

volunteers including teachers, elders, youth and school-going children above 5 years of age from each village should be selected by the Mission. A detailed plan of action and strategies to be adopted is given in figure 1

Figure - 1 depicts that Phase- I includes . .

- (a) Fixation of venue,
- (b) Fixation of time,
- (c) Understanding the needs,
- (d) Curriculum (need-based),
- (e) Medium of instruction.

In the second phase, these are implemented to the most illiterate (poorest of the poor) and who are exposed to the Basic Literacy Programme.

In the third phase, these learners are given opportunity to interest with developmental Staff. They are made aware of the income generating programmes, banking credit structure, co-operatives etc. by these personnel.

In the fourth and final stage, from the above functionally literate learners, "potential learners" are identified (a few). These potential learners will continue the basic literacy programmes upto phase III while the volunteers will be busy in inducing post literacy programmes to the potential learners. This cyclic process will continue till the whole village is functionally literate with basic awareness on health, sanitation, employment, democratic norms etc.

Urban and Rural Areas

Campaign-based approach should be adopted in which mass mobilisation of various groups and institutions should take part. The contributors are .

- Voluntary organisations
- Religious institutions.
- Educational institutions/university.
- Panchayat.

In the mass mobilisation various groups of people can be enlisted for providing literacy and in the implementation of functional literacy programmes.

These groups are .

- Panchayat officials.
- Teachers (private/governmental)
- Retired persons (interested potential groups)
- House wife (do .)
- Educated adult youth

Other than these organisations and volunteers the thrust area and objectives should be specifically framed. Mass media and mobilisation of human and other resources should reach to the streets and lanes of the region. Post-literacy programmes should be continued as a follow up of literacy programme.

Total literacy campaigns have been conducted, completed and concluded in 75 districts and post-literacy campaigns have also been launched in these districts. An expert group has been set-up for proper evaluation. In the Eighth plan, the main strategy would be on the adoption of area approach in the programmes of adult education. 345 Districts would be brought under the total literacy campaign by the end of the Eighth plan period. It is proposed to cover about 80 lakh persons through total literacy.

But, in 1994 India is still communally, politically, economically and population-wise in trouble-some and turbulent situation. Population is well over hundred million non-literate adults. So, the need of the hour is to develop sensitive, sensible and sustainable educational system which will flourish and survive in the heart of each and every village learner and voluntary instructor. The system should respond to the community needs and the community should, in turn, respond to the strategy and the system. If there is a way to compete and develop at par with other nation countries in the international scenario, India has to achieve the 'literacy targets'.

Simultaneously, with this literacy work, population control measures and fertility regulating behaviour studies will have to be carried out with zeal and enthusiasm. Hopefully, the literacy scenario of India will be streamlined and strengthened by the year 2000 A.D.

Early Childhood Care and Education

BHUIJENDRA NATH PANDA
Reader, Department of Education
Regional Institute of Education
Bhubaneswar 751 007

Education for all by 2000 A D in India has attracted attention and importance. To achieve the target of Education for All (EFA), early childhood education is a necessity for the proper development and school readiness of the child. If EFA is to be achieved by 2000 A D, importance to early childhood education should be given with equalisation of educational opportunity. A healthy and educated child of today is the active and intelligent citizen of tomorrow and therefore their survival and care is essential in the context of EFA.

Education is a pre-requisite for progress and development. From the point of view of education as a human need, everyone has the right to education. Not only the importance of education has been recognised by the world body but also emphasis has been given in our policy document on education (NPE, 1986, revised 1992). The concept of education for all has attracted global importance after Jomtien conference of 1990. If EFA is to be achieved by 2000 AD, a break-through must take place in India. The notion that every individual is entitled to receive an education, has been fundamental to the overall commitment and activities of UNESCO since its inception in 1946. The reason is that UNESCO subscribes to the view that a good quality primary schooling and the provision of essential knowl-

edge and skills for adult to cope with the diverse demands of the modern world should be available to all people regardless of socio-economic status, cultural background, gender, race, ethnicity or geographic location.

Out of many ways to achieve the target of EFA by 2000 AD, early childhood education is widely recognized as significant for child development and school readiness and as a strategy for promoting equalization of educational opportunity, therefore, it must be seriously regarded as an integral component of educational planning and development.

India has the second largest child population in the world and approximately 40% i.e., two fifth of the population are children upto 14 years of age and out of which children between

3 to 6 years old are approximately 75 crores. These children are our future and our most precious resource. They are the man's greatest acquisition and provides hope and aspirations to the society. Thus a healthy and educated child of today is the active and intelligent citizen of tomorrow and therefore, their survival and care is essential in the context of EFA.

Children are the mirror of a nation and precious national resource. At the early years of life the child tries to copy his elders in every way he can. Different western and Indian educationists like Rousseau, Froble, Gandhi, Tagore and Sri Aurobindo have given emphasis on early childhood care and education. Noted psychologists like Erikson, Piaget, Bloom, Jenson etc., have given importance on early childhood and found that 50% of the total intellectual development of the child is completed by the time a child is four years old. After all, it is the children whose individual development in every respect will shape the future of our globe. In this connection, Abraham Lincoln explained that "A child is a person who is going to carry on what you have started. He is going to sit where you are sitting and when you are gone to attend to those things which you think are important. You may adopt all the policies you please, but how they are carried out depends on him. He will assume control of your cities, states and nations". There are also number of studies conducted in the world and in India i.e. Bowaby (1968), Robson et al. (1969), Staub (1973), Mialaret (1976), Clark and Cheyne (1979), Shinman (1981) and Muralidharan (1978-1986) etc. and found out that child's potential for learning is determined to a great extent in the early childhood stage. So, the potential in the children can be harnessed and kindled by providing proper education and care at an early stage so that they in turn can contribute for accelerating the development of the country.

Though the importance of human being as a resource has been realized since time immemorial in India the stress on HRD has been laid in the 7th plan and we realised that they are the real wealth of a nation. In this context V.K.R.V. Rao explained that human being is not only an important means of production, but practicable too. The construction and fall of world civilization, in every era, depends on human beings and he is both the author and hero of the world history. He can mobilise the natural resources for economic development of a country and act as a basis / primer for all development. For instance, the rapid post-war recovery of a country like Japan which suffered the worst time to become great economic power within a short period of time only by the strength of their human resources. Thus, we have to take care of our precious resource from the very beginning because early childhood period is the foundation for personality, attitudes, social confidence, habits formation, learning skills and intellectual development.

If left otherwise, a slight handicap in this period would be irremediable in the later part of life. So, education to these tendermost constituents is the basic necessity for development of human society. It is through education that a nation transmits its heritage, recreates its culture, strengthens its economy and conserves its values. In U.K. it was realised by everybody that education is not an expenditure but an investment in man and development of human resources could not be ignored in view of the rapid reconstruction. The noted economist like Alfred Marshall, Sultz Harbison, Benson, Kuznets, Adam Smith, Frankly and Robert Brown pointed out that investment and expenditure on education increases more national income than expenses on road, bridge and other capitalised goods and bitterly criticise the people who denied necessary funds for financing educational programmes. So, if adequate measures

are not taken for the spread of education then economic disabilities, regional imbalances and social injustice will widen further, resulting in the building up of disintegrative tensions. Thus expenditure in education is the unique investment for present and the future.

In this context the then Prime Minister of India, Mr. Rajiv Gandhi has said that " ... the basis of any development is not dams, power stations and industries but the people who are going to build those dams and run those industries. Similarly, in the words of Gabriela Mistral " We are guilty of many errors and many faults, but our worst crime is abandoning our children, neglecting the fountain of life. Many of the things we can wait, the child can not. To him we cannot answer 'tomorrow', his name is 'today'. So, investment in man should not be treated in the form of financial expenditure having a financial return.

Now the question arises how are human resources to be developed? How can we achieve the target of EFA by 2000 AD? Here the role of teacher is crucial because whatever policies may be laid down, in the ultimate analysis, these have to be interpreted and implemented by teachers in the real classroom teaching-learning process and education is only the means to an end to this mission. It is also recognised that education can help and ensure a safer, healthier, more prosperous and environmentally sound world, while simultaneously contributing to social, economic and cultural progress, tolerance and international cooperation. Now the job of a teacher is more challenging. It has to be more dynamic rather than talking and listening machine otherwise whole system will be dysfunctional. They are the builders of a nation's destiny and the real architects of a nation. The teacher is a living model for his students in terms of selfrealisation and intellectual attainments. But, the present day teacher is lacking with many qualities and forces us to

look backward instead ahead. The situation has to be improved if progress is to be made in the near future. At the first step, there is a need to overhaul the teacher education programme and link it to achieving EFA in such a manner so that 21st century would be a miracle for the whole world. In this context the following suggestions may be taken into consideration for improving the teacher education programmes for achieving the target of EFA by 2000 AD and preparing them to act as a better resource of the society. Thus following are the host of measures :

- Teacher education curriculum certainly needs rethinking in the light of the new social order i.e., as per the needs of technological society curriculum should be changed
- Effectiveness of teachers has to be judged in a strict system of accountability and necessary punishment should be included for the poor performance of the teacher
- Continuous evaluation of a teacher's performance should strictly be followed by a group of unbiased secret expert. Inefficient teachers should be weeded out and the efficient ones should be recognised and rewarded with promotion
- Teacher education institutions must have autonomy in adopting their theory courses and field experiences suiting to the practical local needs and demands i.e. lesser content and more practice
- Recruitment of teacher to all teaching posts be made and maintained on the basis of adequacy, competence and merit with weightage to teaching aptitudes
- The power of corrupt and illiterate politicians from the educational insti-

tutions must be stopped and the politicised academic climate should be avoided

- The resource persons who are giving training to pupil teachers need to be oriented properly to deliver the content in an effective manner.
- Elementary teacher training innovative courses may be introduced with maximum emphasis on operation black board, child centred education, value education, and orienting the teachers towards MLL strategy with a focus on teaching of language, mathematics and environmental studies and according to the needs of the children in schools
- Emphasis should be given on open-

ing separate teacher training institution to orient the teachers to motivate the girls/ SC/STs, street children, out of school children and OBC for achieving the target of EFA

- Strict provision should be made to orient the teachers of elementary, primary, and secondary school in every five years to up-date their knowledge and skills for the achievement of professional competence

Thus it can be said that the teacher who is the builder of the nation can do and undo everything for achieving the target of EFA and enhancing the resources for national development if proper attention is given on the above holistic measures.

Education of Disabled Children

ANUPAMA BHATIA
48 A Type D
BHEL Township
Sector 17 NOIDA

Every one is not similar with the other so far as the capabilities of hearing, vision and physical structure are concerned. Unfortunately some children have disabilities due to certain internal or external factors. They have difficulties in reading, writing, spelling, handwriting, mathematical memory and speech. Through task analysis and the diagnostic remedial method the teacher can handle the children with learning disabilities. For all this a proper planning and coordination of classroom activities is a must. There is an important need to identify these children at the primary level for the proper intervention and remedial teaching to be adopted whereby weaknesses could be remediated

A child with learning disabilities is one who is intelligent enough to achieve more developmental or scholastic progress, who has normal vision and hearing, who has received adequate environmental opportunities and conventional instruction in academic areas, and who had adequate motivation to learn, at least during his early school experiences. The child faces major difficulties in understanding of using writing, spelling, and/or arithmetic during the developmental period (before 16 years of age).

It is very important to identify the children with learning disabilities at the primary level, so that proper intervention or remedial teaching could be planned for the child. The following characters of learning disabled children

would be helpful to the teachers of the primary classes to screen out the children with learning disabilities

General Behavioural Characteristics

1. Discrepancy between apparent brightness and progress at school.
2. Slow maturation in motor development
 - Gross motor movements such as walking, skipping, balancing;
 - Fine motor movements in play activities like fitting parts together of puzzles, and in tying laces, fastening buttons,
 - Hand-eye co-ordination such as in

catching a ball, pencil control for writing

- 3 Poor sense of direction, confusion of left and right,
- 4 Lack of sense of time
- 5 Lack of concentration
6. Short attention span,
- 7 May be left handed or have been late in deciding which hand to use.
- 8 Disruptive behaviour
- 9 Drastic changes in moods
10. Social immaturity and self centred behaviour.
- 11 Nail biting
- 12 Frequent problems with peers
13. Impulsivity.

Reading Difficulties :

1. Reads slowly and hesitantly
2. Constantly loses place, either missing out whole chunks, or reading the same passage twice.
- 3 Most common reading errors .
 - (a) Confusion in similar letters - d/b, n/u, p/q, m/w, v/u,
 - (b) Reads backwards (on/no, saw/was, pam/map, God/Dog)
 - (c) Reads letters in wrong order (felt, left,/ act/cat, expect, except)
 - (d) Confusion in short vowels (beg/bag, lid/led)
 - (e) Misreads initial consonants .- (buck as duck, put as but, how for now)
 - (f) Puts syllables in the wrong order (animal as aminal; hospital as hospital, crisp as crips)
 - g) Misreads little words such as "a" for "and", "the" for "a", from/for; were with
 - (h) Ignores punctuation
 - (i) Omits prefixes, "un" and suffixes

"s", "ed", "ly" ing.

Spelling Difficulties

- (a) Writes in wrong order (simon/siomn)
- (b) Reverses and inverts letters (b/d, p/q, n/u, m/w)
- (c) Mirror writes y nomIS, Simon)
- (d) Spells words as they sound (buzy is written as bizzy)
- (e) Omits letters (lump/lip, went/wet)
- (f) Adds letters (went/whent, what/whant)
- (g) Cannot match up the same letters when asked to Fig 1

1	cat	cat
2	run	run
3	onn	arm
4.	tran	train
5	shot	shout
6	cvit	correct
7	sici	circle
8	hevin	heaven
9	eekt	educate
10	mt	material
11	rcn	ruin
12	falk	fashion

Fig 1 Wrong spellings

Box and grill

Fig. 2 Wrong order of spellings

Fig. 3 Mirror writing of the numbers 3,7,4 by a child of age 7 yrs. 2 months Also demonstrates problem in addition

Fig. 4 Wrong multiplication shown by a child of age 9 yrs. 3 month Also shown wrong spellings.



Handwriting Difficulties

- (a) Uneven letter sizes
- (b) Poor spacing for letters and/or words.
- (c) Poor formation of letters even when copying
- (d) Tendency to mix upper and lower case letters.
- (e) Writes rotated and mirror images of numbers.

Mathematical Difficulties

- (A) Readiness Skills
 - (i) Can't discriminate between different sizes (big/small), shapes (Δ \square \square) quantities (more/less, many/few).
 - (ii) Problems in One to one correspondence
 - (iii) Difficulty in counting
 - (iv) Can't understand groups or sets
- (B) Computational skills, and Time & Money Concepts :-
 - (i) Confusion in place value
 - (ii) Difficulty with fundamental operations of addition, subtraction multiplication and division
 - (iii) Difficulty in understanding fractions.
 - (iv) Problems in telling time.

- (v) Confusion in understanding monetary values.

Problem Solving Skills

- (i) Difficulty in understanding arithmetical terms and signs.
- (ii) Problems in the analysis of story (word) problems.

Memory and Speech Difficulties

- (i) Poor articulation
- (ii) Poor vocabulary, misuse of words.
- (iii) Confusing sentence structure
- (iv) Confusion of sound in speech - f/th/v
- (iv) Tendency to forget names of common objects and people.
- (v) Difficulty in learning days of the week, months of year, multiplication tables
- (vi) Inability to recognise rhymes
- (vii) Inability to follow verbal instructions, especially a sequence of instructions

What Causes Learning Disability ?

Learning disability can be caused due to

- (a) Internal factors
- (b) External factors

Children's learning disabilities due to internal factors may be the result of some neurological dysfunctioning attributed to -

- (i) Illness or injury during development of central nervous system (brain and spinal cord)
- (ii) Circulating, toxic or metabolic dysfunction which occurred during the prenatal period
- (iii) Biochemical irregularities.
- (iv) Toxins and poisoning.
- (v) Nutritional disorders.
- (vi) Perinatal brain damage
- (vii) Developmental or maturational

lags

(viii) Inherited familial traits.

External factors are conditions outside the child and beyond his control "teaching Disabilities" or "instructional disabilities" are the two terms used to describe the external factors. It implies that the child does not have an inherent or true learning disability. The teaching disability may be the result of :-

- Inappropriate teaching methodology.
- Inappropriate materials
- Inappropriate curriculum.
- Lack of individualisation.

Each learning disabled child (indeed every child) is a person with individual strengths and weaknesses. Learning disabilities involve many facets and require inter-disciplinary interaction, general and special educators are ultimately responsible for providing the major diagnostic inputs and the most significant components of the rehabilitation programme.

Principles of Education

1. Behaviourist Principles — The effect of reinforcement, non-reinforcement and punishment is greater in learning disabled children because of their previous reinforcement histories. Many children have developed a negative attitude to work because they have experienced little reinforcement in their lives. We may state that first principle to be applied with learning disabled children is to reinforce and reinforce again, to develop a pattern of gaining and maintaining success. Punishment is as potent as discouraging the child. An occasional failure may enhance the performance of the normal children, but may be extremely detrimental for the L.D. children.

2. Task Analysis — One important devel-

opment in special education which can assist in finding where "the child is at" is that of task analysis or instructional design. It is a procedure where a task is broken down into its prerequisites skills. If a child is then failing in this task we can look at the prerequisite skills to see whether he/she has mastered those. If not, then, the prerequisite skills can be taught. Precise task analysis can lead to important remedial procedures when carried out with a particular child or small group in mind.

3 The Diagnostic Remedial Method

Another important principle in educating the learning disabled child is that of teaching to the strengths while remediating the area of weakness. The diagnosis of children's specific learning problems and the setting up of remedial methods based on such analysis has been called the diagnostic remedial process. There are broadly five steps in the process as follows :-

1. Setting up (and modifying) the diagnostic hypothesis
2. Planning the teaching task.
3. Implementing the teaching plan
4. Evaluation of pupil performance.
5. Modification of the plan and the cycle of these steps continues

Learning disabled children form a widely divergent group of individuals with individual strengths and weaknesses. It is important that the needs of these children are recognised by the ordinary school teacher and dealt within the normal primary school. A remedial classroom is the best place for this, where at least a trained special educator/trained personnel can attempt to recognise the child's strengths and weaknesses and to use such knowledge in remediation.

Training the Trainers

SAROJ KUMAR DAS

Reader in English

Vikramdev College, Jeypore, Orissa

Teachers impart knowledge and information to students through teaching. Recently teachers' orientation programmes have acquired a wide-standing acclaim and position. But what are the lacunas and obstructions in this field that are withholding teachers from getting themselves properly oriented? The author here points out certain realistic facts about this problem. He argues that the trainers are ceased to be teachers once they take up the role of trainers. And with that their acquaintance with classrooms become less and less. As such a gap is widened between the trainers and actual classroom practices. He stresses the fact that trainers should evaluate their knowledge and technique taking in step with international trends.

It is now increasingly being felt in all educational quarters that teacher trainers need more new orientations and that they should be acquainted with new techniques and new methods — keeping in step with the increasing demands of this new world. Most trainers are getting 'guttled' in their closed world of absolute knowledge and most of them have little acquaintance with the growing intelligence of children in the actual classrooms through their external exposure to the media. Once a person assumes the role of a trainer, he is virtually estranged from the actual teaching situation and he ceases to be a teacher. All these necessitate some form of training with relevant modern information in their area and familiarising them with the latest global insights available.

Firstly, let us see who are our trainers. In most training colleges the trainers are lecturers with a Master's degree in Education. Most of them haven't ever received any training in training teachers, except that their possession of an extra load of theoretical knowledge. Most of them haven't ever taught in an actual school. Therefore they hardly have a first hand knowledge of the problems of teaching and the constraints under which our teachers are teaching in different types of schools including tribal schools. Most of them hardly realise that the same type of teaching can't be imparted in an English medium school and a tribal high school. Therefore, even though our trainers are very much theoretically sound, they are less

relevant to actual classroom teaching.

Now let's see why most trainers don't change over the years. The libraries of most B Ed colleges, DIETs and C T schools are ill-equipped. Even the moderately priced NCERT journals are not subscribed to. Strong attitudinal changes are necessary to make these trainers see what's happening in the field of teaching in the international sphere. They should leave their complacencies and try out novel ideas and judge their efficiencies. The fruits of research in education in foreign countries must reach our trainers. For example, my survey shows that many trainers training in English language teaching methods have not heard of the Central Institute of English and Foreign Languages Hyderabad, where books and journals provide up-to-date knowledge on all language teaching including English. Trainers must occasionally visit these apex bodies in their field of specialisation and gather good bibliographies for further readings. Trainers must realise that with the change in educational and social spheres and with the introduction of computers, Educational T Vs, novel information technology etc. They should hand down to the trainees, not only up-to date knowledge but also new expertise in handling these instruments. Therefore, training curricula must include new items and not those hackneyed, stereotyped methods, which have lost their relevance and utility.

Thirdly, lack of feedback also makes our trainers more isolated. Once the trainees pass out, there is hardly any rapport with them. Trainers must include within their schedule regular class-visit and observe the teacher in real action. In some states the courses of studies prescribed by State Boards of Secondary Education and the B.Ed colleges, DIETs or C.T schools are hardly intimated. The new teacher is at times confused with the new materials in Science, Geography and Mathematics and doesn't

know how to tackle them. Therefore trainers must involve themselves in planning the courses of study and keep in touch with the teachers through 5 days or 6 days seminars or workshops. Trainers could take up action research and see the effectiveness of some techniques and then generalise them in the next training classroom. They should leave their ivory towers and visit rural schools and try out new ideas.

Trainers all over the world are estimated to be authoritarian and examples of bullying trainees, is not rare. Training should not always be a 'top down' process and in practice teachings the trainers should not behave like formidable ghosts. There should be more scope for flexibility, more exchange of ideas in trying out technique in different ways, more discussion with the trainee in accomplishing a task. Trainers must realise the psychological constraints under which a trainee takes a practice teaching class. They should not make them more depressed and confused. The training classroom should be more relaxed with the trainees doing a lot of talking and contributing their ideas. Instead of long lectures, the trainers should work with worksheets, handouts, questionnaires, and lecturettes. He should float a controversial idea and allow the trainees to discuss in groups. When the responses have been elicited, he should synthesise the ideas with actual views of authorities in the field. A trainer must always hand over to the trainees a long set of alternative ways, so that the teacher can use them according to the setting, the standard of the students and according to their backgrounds. Unfortunately, most B.Ed and C.T courses expect trainees to mug up a big repertoire of theory and reproduce them verbatim in the final examination paper.

Ours is a world of awareness-raising. When in all fields the focus is on awareness, then why not among the trainers? Therefore trainers must

know how to make the trainees aware of the new wind blowing from all sides. Awareness-raising helps in teaching better and the dependence on the trainer lessens. In this process a trainer could take up different handbooks and try them out in actual classrooms or simulated classes. Trainers must also develop deep accommodating views in all matters related to teaching. This should be a major part of their own awareness-raising activity.

A new trend is rising throughout the world and that is of revaluation. Our trainers also need to revalue their knowledge, the technique they hand down, their position as a trainer, their relevance for the society etc. Such revaluation will certainly usher in real development in our trainers. If trainers need to develop, it has to be a purely autonomous attempt. Nobody is there to thrust or impose development on them. The work of most trainers goes unsupervised and unsupervised. Therefore, every development has to be self-imposed, self-augmented and self-propelled. This becomes the most difficult aspect of a trainer's life. He must know the objectives clearly and change them according to the need of time. If change has to be brought in, then the

management of change has also to be learnt, realised and implemented by him. The trainer must assume the role of a 'reflective trainer'.

Training trainers is a high level intellectual activity for which we need highly experienced trainer's trainers. The most innovative of the trainers with a sound academic background and also a steady research-base could be elevated to that level. The trainer's trainer needs to know the processes of teaching prevalent in the State from primary to the tertiary level. Secondly, he must also have a good knowledge of all the teaching practices now commonly being practised throughout the world. He must have the ability to place our teaching in global perspectives and bring about changes, without being uprooted from his native ground.

Trainers need to be shaken from their fossil-like slumber and through personal development must try to change the teaching scenario of our country. Dynamic trainer's trainers could also contribute in making our trainers more introspective, so that they could reevaluate the present and usher in a lively teaching atmosphere. When our country is emerging as a global power, we need trainers with global vision but at the same time standing firmly on Indian soil.

Games as an Interesting Teaching Strategy

D. BHUVANA

Maharishi Vidyut Mandir

28, Dr. Guruswamy Road Chetpat, Madurai

Playway technique is an important strategy for involving children in active learning. Children are curious by nature and love to live in make believe world. Often they create their own plays and games. This innate quality needs to be sustained and promoted even when the child comes to the school. Often the formal rigid classroom does not allow a child to find fun and joy in learning. Through plays and games children can be made to enjoy learning even difficult concepts and skills. Games and plays help to develop physical, mental and social aspect of a child's personality

Learning no longer remains a dull and dreary affair. A variety of games can be used to develop simple concepts in children. Games can be used both at the initiation of a new learning or as an important tool for reinforcing what a child has already learnt. Devising games is not an expensive exercise but definitely it requires imagination and skills on the part of a teacher. Considering the potential that games have in making teaching-learning interesting and joyful, it will be worthwhile for a teacher to devote time for making games and plays an imperative part of the teaching-learning process. Once a teacher uses games as a technique of teaching he/she would soon find that it is a worthwhile experience and would make this as important aspect of the teaching-learning activities.

Simple concepts of counting, number games, language games can be used in a vari-

ety of ways. Educational games can be of many types, viz, board games, card games, dominoes, puzzles etc. Here we have described a few simple and inexpensive games that a teacher can use in the classroom. These are only illustrative examples. The teacher may modify these to suit his/her requirement.

Guard the Farm

It is a simple card game. Basically it can be used to teach a large number of concepts depending on the initiative of the teacher. The example given here is one that can be used for identifying and classifying variety of animals in the neighbourhood.

Objectives

- To identify and name the animals that live on a farm (domesticated animals)

- in water and in jungle
- To help children classify a variety of animals, birds and insects
- To match the animals with the place where they live

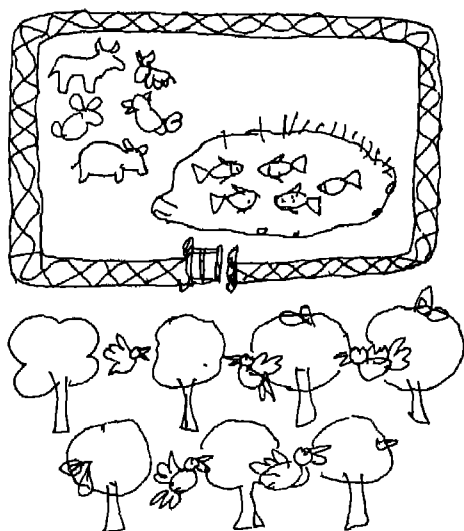
Materials Needed

Following materials will be needed to make the game:

Thick sheet of chart paper, 20 small (2"x1½") card board pieces, paper, gum, and different coloured sketch pens

How to Make the Game

On the chart paper draw a picture of a farm, a pond and surrounding of wood/jungle. Draw five circles in the farm, five in the pond and five outside in the jungle. Join these circles with a line as shown in the picture.



Take 20 pieces of used card board. Cut these into required size. Paste white paper on these and draw pictures of animals/birds/insects that live on the following habitat

- animals that live on land
- animals that live on land and in water both
- animals that live in water

Paint the other side of the cardboard pieces with primary colours such as red, yellow and blue. Make sure that you draw pictures of some farm animals.

How to play the Game

Divide the children into two groups. Place the cardboard pieces of animals/insects/birds face down in a stack.

Ask a child from group I to pick up a card and place the card, let him identify and name the animal silently and put it in the correct circle. Let all the other children say whether she/he is right or wrong. In case the child is right give one mark to the group I. Now let it be the turn of the other group. Like this the game continues with children taking turns one-by-one. In case there is wrong response from a group, that group misses its turn. Let one child be the score-keeper. The group that scores maximum marks is the winner. This game can also be played in smaller group or in pairs.

Follow up Activity

Learning acquired by the child through this game can be used for teaching related units such as adaptation of animals to the surroundings, pets and domestic animals etc.

Jumping Postman

This is a simple card game to teach children simple addition and subtraction. The game can also be used for evaluating concept of addition and subtraction.

Objective

To help the children enhance their skill of addition and subtraction.

Material Needed

Twenty medium sized cardboard pieces measuring (10"x10") white paper.

A small doll — dressed as a postman

How to Make

Paste white paper on the cardboard pieces (20) Write numbers 1 to 20 on these cardboards. Take a small doll and dress it up as postman

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
17 18 19 20

How to Play

To start the game, the teacher arranges the cardboard pieces showing numerals on the floor. He/she then calls up the children one by one. He/she calls out a number and asks the child to place the doll on the number called. He/she then calls out another number and says 'and' before the number called. The child then

has to jump the doll as many number of places as called. For example, if the first number called is 5, the child places the postman on numeral 5. Next number called is 'and 3' the doll jumps three steps and lands on numeral 8. In this way a child learns that 5 and 3 makes 8. Thus simple addition can be taught. Teacher can use the blackboard to write this as $5+3=8$. In this way simple concept of 'plus', 'is equal to' can be introduced.

In the same way for teaching subtraction, the child should be asked to place the postman on the first number and to jump back the steps mentioned and to see on what number he is on. For example what is $11-2=$?

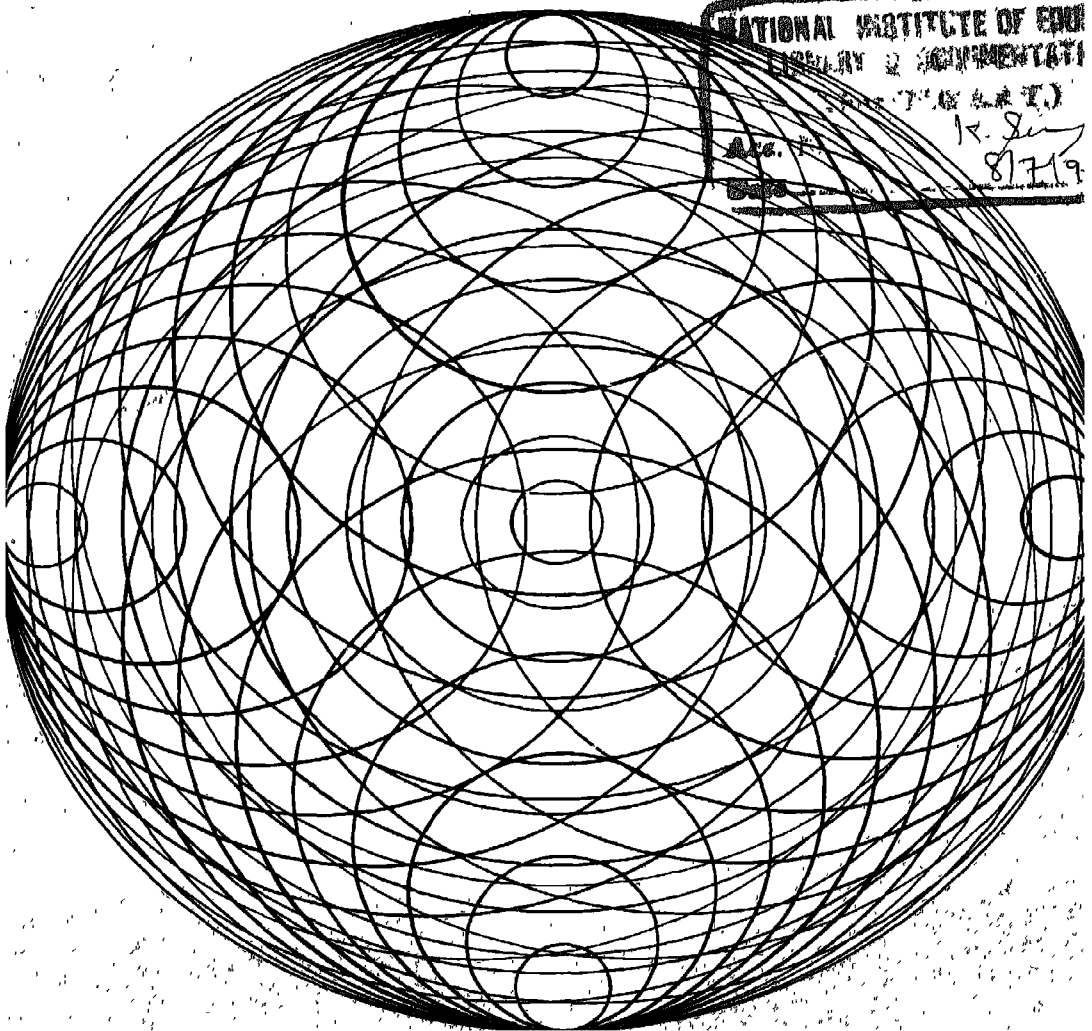
Similarly teacher can use blackboard to write this as $11-2=9$

In this way, concept of "minus" can be taught.

In this case the child should place the postman (doll) on No. 11 first and would jump back two steps and would reach on No. 9.

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The major features of **The Primary Teacher** are :

- 1 Educational policies concerning primary education
2. Questions and answers
- 3 States round-up
4. Illustrated material for classroom use.

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GANDHIJI'S TALISMAN

“I will give you a talisman. Whenever you are in doubt or when the self becomes too much with you, apply the following test :

Recall the face of the poorest and the weakest man whom you may have seen and ask yourself if the step you contemplate is going to be of any use to him. Will he gain anything by it ? Will it restore him to a control over his own life and destiny ? In other words, will it lead to Swaraj for the hungry and spiritually starving millions ?

Then you will find your doubts and your self melting away.”

M.K. Gandhi

Editorial

OUR “Father of the Nation”, Mahatma Gandhi had a very clear vision for the children of India. He firmly believed that the education of the intellect is not enough unless it is integrated with the education of the body and soul. He emphasised on basic education of all children of villages and cities.

Gandhi's educational ideas were mainly based on his philosophical principle *Satya* (Truth). In the article, ‘Gandhian Concept of Basic Education’, the author has thoroughly elaborated Gandhi's thought about all aspects of education—such as curriculum, discipline, character building, medium of instructions, religious education, scholarship, state aid to religious institutions, etc.

Gandhi often suggested intermixing of religious communities which would enhance the unity and integrity of a nation. In the article ‘Playground as Open Air Schools’, the author has emphasised that if playgrounds are designed properly it could work as open air schools. Playgrounds provide opportunities for team work where the children could intermix with one another and could develop qualities like mental and moral discipline, alertness of mind, precision, determination, self-control, courage, self-denial, loyalty, leadership and sportsmanship like magnanimity.

While talking about playgrounds, it comes to one's mind that if mathematics could be taught in a play-way method, it would motivate children to learn mathematics with interest and understanding. To avoid failure and fear and to change the attitude of children towards mathematics the effective use of school curriculum, play-way activities, low-cost teaching aids and well designed workbooks help a lot. The author in the article ‘Learning to Use Mathematics at Upper K.G. Level’, has suggested a few interesting examples using play-way methods. The author of the article ‘Newspaper in Teaching-learning Process’ comes out with excellent examples to show how newspaper could be used as an aid of teaching-learning process. Since the newspaper is easily available, it can be used for providing interesting activities taking into consideration each student's individual needs. In the article, ‘A Week with Mrs. Fanny Brown’, the author has described imaginary week-long experience with Mrs. Fanny Brown taking her as a model teacher. In the article ‘Dynamics of Dropouts: An Observational Analysis’, the author finds out that besides several socio-economic causes there are some reasons why there is still a high dropout rate in our schools. It is a prime requirement of teachers to take the onerous task of building up the positive work culture among the students and inculcate in them value

system from the very childhood. In the article 'Radio Broadcast for Primary School Children', the author suggests that if the teacher takes assistance of radio broadcast it could be an effective audio aid and a boon to overcome the magnitude of problems and paucity of resources in majority of primary schools. In the article, 'Failure of UEE—A Few Thoughts', the author analyses certain causes and reasons for this failure and suggests ways to improve the situation thereby. In the article 'Effective Preparation of Teachers', the author emphasises on the great responsibility entrusted to every primary teacher. The preparation of teacher should be effective and efficient. For this the teacher educators need to be careful in planning and implementing programmes for teacher education as also a commitment on the part of the teacher is necessary.

In the section 'News and Notes' there is news for the teachers. The National Council for Teacher Education (NCTE) has been established by an Act of Parliament (Act No. 73 of 1993) with a view to achieve planned and coordinated development of the teacher education system throughout the country as well as for the regulation and proper maintenance of norms and standards in teacher education, the details of which have been discussed in this section.

ACADEMIC EDITOR

Gandhian Concept of Basic Education

R.B.L SONI

Lecturer

Regional Institute of Education, Bhopal

Gandhi's educational ideas were mainly based on his philosophical principle Satya (truth) He believed in the existence of one soul and the principle of equality was a logical corollary of this belief The concept of educational equality convinced him of 'Education for all' without any discrimination of caste, colour and creed. He advocated free and compulsory education to all as true democracy presupposes the education of the masses Gandhian concept of free and compulsory education was later enshrined in the Indian Constitution.

In Article 45 of the Indian Constitution it was stated that all children in the age group of 6-14 years would be provided free and compulsory education. However, this goal is yet to be achieved. Gandhi differed in his approach to education from that of traditional education which was prevalent at that time. He tried to experiment with different approaches to education and put forward reasons in support of his arguments. His ideas of education were based on the need of village and city communities and he was concerned about the poor who lived in the villages. The main contribution of Gandhi was his concept of basic

education. He also gave his opinion regarding religious instructions in schools

Meaning of Education

Scholars have defined education in many ways. Some of them considered education as a preparation for life in the community whereas others regarded it as an endless process. Pestalozzi defined education as the natural harmonious and progressive development of man's innate power. According to Swami Vivekananda "Education is the manifestation of divine perfection already existing in man." According to Ravindranath Tagore "Education

means enabling the mind to find out ultimate truth which emancipates us from the bondage of the dust." Gandhi, however, maintained that "man is neither mere intellect, nor the gross animal body, nor the heart or soul alone. A proper and harmonious combination of all the three is required for the making of the whole man" (SWMG, Vol VI, 1968, p. 506). As such, the education of the intellect cannot be separated from the body and the soul. It has to be an integrated whole where all three—intellect, physical body and the soul have to be activated to function together in order to achieve the full development of a harmonious man. Gandhi was in favour of using all faculties of mind and all parts of the body to develop them to a maximum possible extent.

Gandhi categorically stated that literacy is neither the beginning of education nor it is an end, "It is only one of the means whereby man and woman can be educated" (SWMG, Vol VI, 1968, p. 507). He defined education as "an all-round drawing out of the best in child and man—body, mind and spirit" (ibid). For Gandhi, training in handicraft should become an essential part of education from the very beginning. The training in handicraft would not only give a sense of new creation and dignity of labour to a child, but it would also make every school self-supporting, provided that the state buys the products from such schools.

The Concept of Basic Education

Gandhi felt that the prevalent education system at that time did not cater to the needs of the Indian society. The ordinary education system cared only for the mind (Harijan, 9-11-1947), and ignored the development of physical body and the soul. Therefore, he recommended that "education must be of a new type for the sake of the creation of a new world" (Harijan, 19-1-1947, p. 494).

In 1937, Gandhi developed a scheme of education based on his own ideas, and this scheme is popularly known as a National Programme in Basic Education (Nai Talim). Gandhi presented the salient features of this scheme in the All India National Education Conference held on 22-23rd October, 1937 at Wardha. The conference was attended by Education Ministers of seven provinces. A committee was appointed to prepare the detailed syllabus of the basic education scheme under the chairmanship of Dr. Zakir Hussain. The committee submitted its report on 2nd December 1937. This report contained detailed syllabus of basic education scheme, and made valuable suggestions about several aspects, such as training of teachers, supervision, examination, administration, etc.

Gandhi acknowledged the importance of basic education and maintained that it should be free and compulsory to all children as it improves the quality of life. The basic education (Nai Talim) is everchanging, ever new and everfresh. While designing basic education for India, Gandhi's concern was for village children who were poor and did not have access to educational facilities. He said, "The basic education is meant to transform village children into model villagers. It is principally designed for them. The inspiration for it has come from the villages" (Constructive Programme, 1961, p. 18). He, however, maintained "basic education links the children, whether of the cities or the villages, to all that is best and lasting in India. It develops both the body and the mind, and keeps the child rooted to the soil with a glorious vision of the future in the realization of which he or she begins to take his or her share from the very commencement of his or her career in school" (ibid). Gandhi did not clarify whether basic education was meant for

village children only or it was intended for the entire country including the city children. It appears that the concept of basic education was originally designed for village children, but it was later extended to all children.

The question arises why Gandhi's Scheme of Education was called 'basic education'? The reasons for calling the scheme as basic education are:

1. It is based on the ancient Indian culture and it lays down the minimum education which every child is entitled to receive without the distinction of caste or creed.
2. It is intimately related to the basic needs and interests of the child and makes use of his innate potentialities for creative and productive work.
3. It is closely associated with basic occupation of the community, the child hails from.

According to Gandhi, there are four components of basic education. These are craft, art, health and education. Instead of regarding craft and industry as different from education, he regarded the former as the medium for the latter (Harijan, 10-11-1946). Gandhi emphasized the need for educating the child through manual work, not as a side-activity, but as the prime means of intellectual training (Harijan, 18-9-1937). Giving importance to manual work Gandhi said:

Useful manual labour, intelligently performed is the means *par excellence* for developing the intellect. A balanced intellect presupposes a harmonious growth of body, mind and soul. An intellect that is developed through the medium of socially useful labour will be an instrument for service and will not easily be led astray or fall into devious paths (Harijan, 8-9-1946, p. 306).

He further stated: "As the largest part of our time is devoted to labour for earning our bread, our children must from their infancy be taught the dignity of such labour" (YI, 1-9-1921, p. 277). Given the right kind of teachers, children can be taught the dignity of labour and they can learn to regard it as an integral part of education and a means of their intellectual growth. He suggested that the handicraft should be taught not merely for productive work, but for developing the intellect of the pupils (Harijan, 11-9-1937).

The basic education is also called 'education through handicrafts' because Gandhi believed that the education should be given through manual work or handicraft. He maintained that the principles of love and truth play a vital role in basic education. He said:

The root of this new education goes much deeper. It lies in the application of truth and love in every variety of human activity, whether in individual life or a corporate one. The notion of education through handicrafts rises from the contemplation of truth and love permeating life's activities. Love requires that true education should be easily accessible to all, and should be of use of every villager in his daily life. Such education is not derived from, nor does it depend upon books (Harijan, 21-12-1947, p. 480).

Gandhi rejected the notion that "the fullest development of man is impossible without a knowledge of the art of reading and writing. That knowledge undoubtedly adds grace to life, but it is in no way indispensable for man's moral, physical or material growth" (Harijan, 8-3-1935, p. 28). He was of the opinion that teaching of history and geography is as essential as teaching of handicraft. Teaching of geography helps to know where the raw material for a particular craft is produced and what kind of

climate is necessary for the production of that raw material.

Gandhi suggested some vocations such as spinning and sandal making, but he maintained that the choice of a handicraft would depend on the needs of a particular village or a city. Education through handicrafts can promote cooperation between villages and cities and haves and have-nots, as the value of manual work would be realized by city and village dwellers alike. Villages are not merely appendage to cities, rather, both depend on each other for their development and progress. For instance, the cotton is grown in villages and is ginned, spun and converted into cloth in the cities (Harijan, 9-10-1937). In turn, it is the duty of city dwellers and the government to take steps to ensure the development of villages by constructing roads and by providing other necessary facilities to villages.

In imparting basic education, Gandhi's emphasis was on all-round development of a child. He, therefore, included the subjects for teaching which could help to achieve this goal. The curriculum of a primary school should include teaching of drawing, geography, general science, handicraft, health and hygiene, history, mathematics, mother tongue, music and physical drill (Harijan, 31-7-1937, Harijan, 11-9-1937, and Harijan, 18-9-1937).

The direct result of handicraft education, according to Gandhi, is that it is self-supporting, but the test of success is not its self-supporting character. A student who works at a handicraft for three hours a day will surely earn something, but "the self-supporting part will be the logical corollary for the fact that the pupil has learnt the use of every one of his faculties (Harijan, 11-6-1938, p. 143). Gandhi suggested that schools and colleges should not become self-supporting by taking donations, state aid or excessive fees from students, but should become

self-supporting through remunerative work done by the students themselves (YI, 2-8-1928). This can be done by making industrial training compulsory. Gandhi held :

Apart from the necessity which is daily being more and more recognized of students having an industrial training side by side with literary training, there is in this country, the additional necessity of pursuing industrial training in order to make education directly self-supporting (ibid, p. 259).

Gandhi did not like the idea of providing scholarships to students. On the contrary, he suggested that students should be provided some work so that they could earn and pay for their education. He said :

A free scholarship lies and should lie like a load upon a conscientious lad's mind throughout his whole life. No one likes to be reminded in later life that he had to depend upon charity for his education. Contrarily where is the person who will not recall with pride those days if he had the good fortune to have had them when he worked in a carpentry-shop or the like for the sake of educating himself—mind, body and soul ? (ibid)

Methods of Teaching

Gandhi was highly critical of methods of teaching in Indian schools. He said "The method adopted in the institutions in India I do not call education, i.e., drawing out the best in man, but a debauchery of the mind" (Harijan, 5-6-1937, p. 131). He was also against teaching the alphabets, reading and writing in the beginning as it hampers the intellectual growth of children. He argued "I consider writing as a fine art. We kill it by imposing the alphabets on little children and making it the beginning

of learning. Thus we do violence to the art of writing and stunt the growth of the child when we seek to teach him the alphabets before its time" (ibid, p. 130)

Methods of teaching in basic education were guided by the principle of learning by doing. In Gandhi's opinion all parts of the body should function in the process of acquiring knowledge. He said .

In my scheme of things the hand will handle tools before it draws or traces the writing. The eyes will read the pictures of letters and word, as they will know other things in life, and the ears will catch the names and meanings of things and sentences (Harijan, 28-8-1937, p. 225).

In addition to the use of all parts of the body, Gandhi stressed on creating and sustaining interest among the students for learning. Giving an example of teaching the handicraft he asserted that the students should not only be taught how to do a particular handicraft, e.g., spinning, but they should also be explained why it should be done and where the material comes from. In case of spinning through *Takali* (spinning wheel), the mechanism of *Takali* has to be explained. The child has to be told the history of cotton and its connection with civilization. The child needs to be taken to the village field where cotton is grown. In this way, the child learns not only spinning, but also learns about the cotton and the place where it is grown. The child is also made aware of the importance of spinning in order to sustain his interest in learning. Gandhi said that every handicraft has to be taught not merely mechanically, but scientifically (Harijan, 31-7-1937). The whole training, he maintained, would be natural and responsive and, therefore, easy and inexpensive to learn (Harijan, 28-8-1937).

Medium of Instructions

Gandhi believed that the medium of instructions in schools should be in child's mother tongue. Instructions in mother tongue promote creativity, thinking and greater learning among the children in a natural way. Gandhi felt that instructions in foreign language put an undue strain on children and their natural capacities do not develop to the full extent. He rejected the idea that English language promotes greater thinking and creativity. He also refused to accept the argument that English language is essential for international affairs. If Japanese and French can manage without English language, why India cannot do so? He gave importance to provincial languages in higher education. However, he suggested that English can be studied as a second optional language, not in schools, but in the university (Harijan, 25-8-1946). He was critical of those parents who under-evaluate their mother tongue and force their children to speak English and study it as their mother tongue. As far as English as a medium of instructions is concerned, Gandhi argued

The ' foreign medium has caused brain fag, put an undue strain upon the nerves of our children, made them crammers and imitators, unfitted them for original work and thought, and disabled them for filtering their learning to the family or the masses. The foreign medium has made our children practically foreigners in their own lands. It is the greatest tragedy of the existing system. The foreign medium has prevented the growth of our vernaculars (YI, 1-9-1921, p. 277).

Although Gandhi's argument about medium of instructions is rational, it may be contended that imposition of any language, whether mother tongue or foreign, infringes upon the right to freedom of choice. English language as a medium of instructions has been playing a vital

role in India and most of the political positions and high class jobs are occupied by the people who received their education through the medium of English language.

Character Building

Gandhi attached a great importance to character building of students in basic education. He felt that students are the hope of the future and they would be called upon to enter the public life after completing their education. Therefore, the students should realize their responsibilities towards the country and should inculcate a sense of discipline in their lives (YI., 8-9-1927). Although teachers have a vital role in inculcating a sense of discipline and character building among the students, it actually comes from within students themselves (With Gandhiji in Ceylone, 1928). Among other things, a student should be humble and "his behaviour is to be a pattern of exemplary self-restraint" (Harijan, 7-9-1947, p. 314). Giving importance to truth and character building in the lives of the students, Gandhi said :

If teachers impart all the knowledge in the world to their students but inculcate not truth and purity among them, they (teachers) will have betrayed them (students) and instead of raising them set them on the downward road to perdition. Knowledge without character is a power for evil only, as seen in the instances of so many talented thieves and 'gentleman rascals' in the world (Y.I. 21-2-1929, p. 58).

Gandhi suggested that the students should serve the community, particularly Harijans, during the vacations. They can conduct short courses for

children of Harijans and teach them a working knowledge of health and hygiene and take them, for excursion to acquaint them with nearby surroundings (Harijan, 1-4-1933).

Religious Education

Gandhi regarded religion as a matter of individual faith and held that the State cannot concern itself or cope with religious education. He believed that religious education must be the sole concern of religious associations (Harijan, 23-3-1947). He, however, asserted that a curriculum of religious instructions should include a study of the tenets of other religions. For this purpose the students need to be trained to cultivate the habit of understanding and appreciating the doctrines of various great religions of the world in a spirit of reverence and broad minded tolerance. This would help the students to appreciate their own religion (YI., 6-12-1928).

Gandhi warned against mixing ethics with religion. He contended that fundamental ethics is common to all religions and teaching of fundamental ethics is undoubtedly a function of the State (Harijan, 23-3-1947).

Gandhi was opposed to State religion even though the whole community might have one religion. He was against State interference in the matters of religious faith and also against State financial aid to religious bodies. He said "I am also opposed to State aid, partly or wholly, to religious bodies. For I know that an institution or group which does not manage to finance its own religious teaching, is a stranger to true religion" (Harijan, 16-3-1947, p. 63),

Playgrounds as Open Air Schools

SARASWATHI NARAYAN
A/12, Aishwarya Cooperative Society
Devi Chowk, Shastri Nagar
Dombivili West-Thane
District Bombay 421 202

Playgrounds are real recreational fields where through imaginative and sculptured forms of play, the creative ideas in children could be shaped in a substantial way. Modern playgrounds are designed to satisfy the natural desire of children to climb, swing, jump, balance and slide. They are planned to help children progress from games requiring simple skills to those that demand greater coordination, speed, strength and endurance. Children learn most practically while they play and learn to express themselves while in group to adjust themselves, to share ideas and grow independently.

PLAYGROUNDS designed as recreational arena for children are a modern development. Such playgrounds provide a variety of play and exercise equipments, courts for active games and numerous types of sports and field rooms for indoor recreation and wading pools. Recently some countries have made pioneer contribution by creating junk playgrounds where children may play games of obsolete locomotives, boats, trucks and airplanes. Highly imaginative and sculptured forms of play and exercise are installed in some playgrounds.

Playground equipment is designed to satisfy the natural desire of children to climb, swing,

jump, balance and slide. Playground programmes are planned to help children progress from games requiring simple skills to those that demand greater coordination, speed, strength and endurance. Physical activity on the playgrounds helps to counter out the inactivity of mechanised living. Sand piles, kindergarten swings, low exercise apparatus and wading pools are needed by young children. Large exercise equipments, ball fields and basketball, volleyball, hand ball and paddle tennis courts are used at the primary level.

Children in kindergarten are at play most of their day and they constantly learn through

this play They learn to plan activities, to follow simple directions and to adjust to school life. Young children also learn from each other. They learn to express themselves in speech as well as artistic and musical activities. They learn to share ideas and to take turns in using materials. They learn to grow independently and to help others by helping themselves. They develop physically through activities and by learning good health habits.

The activities of singing, playing, painting, gardening, looking at pictures and listening to stories come from Froebelian Kindergarten. The children's responsibility for the house keeping, putting away blocks and toys and cleaning up after activities, comes from Montessori Dewasys.

Students are helped to improve strength, balance, agility, posture, endurance, speed and accuracy. The physical activities lay emphasis on the learning of good healthy habits as well as provide opportunity for the use of their leisure time. Present day physical activities include individual sports like archery, badminton, boxing, tennis, golf, skating, skiing, wrestling etc. In team sports it includes games like basketball, football, hockey, soccer, volleyball, water polo etc. In rhythmic activities it includes calisthenics, folk dance, modern dance, social dance, square dance, tap dance etc.

Most of the school programmes include rhythms, songs, plays, dances, exercises and simple games and athletic skills. These programmes help children to develop their abilities and learn basic concepts of sportsmanship. It also promotes the development of the control of the muscular system which gives skill, resourcefulness and fundamental basis for a broad manual, industrial and artistic training. It provides opportunity for securing mental and moral discipline, alertness, precision, determination, self-control, courage, teamwork, self-denial, loyalty, leadership and sportsmanship like magnanimity. Hence playground is said to be the cradle of

democracy. "The Battle of Water-Loos" was won on the playgrounds of Eton. It means that the activities on the playground go a long way in the development of an individual. They represent a welcome and on the whole a healthy diversion from school routine. These activities have great physical, social, recreational and educational values.

The school, in fact aims at giving all pupils a chance to participate on equal terms and under careful control, in a widely varied range of games and sports. A desirable motto for the school might as well be "A sport for every pupil and every pupil in a sport." The best way to develop school loyalty is to hold contest in inter-school sports.

Today's education is child-centred. Hence we stress on all-round development of the child. Therefore activities that are taking place in schools are now all curricular activities. These co-curricular activities are looked upon as tools and instruments in drawing out the best of the potentialities of the child. The aim of a school is to impart education, education that would help the child to lead a healthy and fruitful life. This education in turn would enable the child to face the calamities and challenges in his present as well as his future life.

Play helps to build up a child and further it helps him to blossom into a well developed, mature person. It helps him to expose himself to a variety of experiences, moulding and shaping him and thus informally educating all the while throughout his life. It develops skills, provides opportunities for the pursuit of established interests and the development of new interests. It also develops qualities like leadership, sportsmanship, cultivates endurance and perseverance, self-confidence sharpens his skills and thus shapes him into a well developed mature person. Hence we can say that "A sound mind is found in a sound body". Thus playground is considered to be an open air school.

Learning to Use Mathematics at Upper K.G. Level

BHARTI BATRA
Department of Mathematics
Bal Bharati Public School
Pitampura, New Delhi

National Policy on Education (NPE) 1986, (Revised 1992) emphatically suggested that mathematics should be an unavoidable curriculum component to develop not only numerical abilities in the children but also reasoning and analysing abilities. National Council of Educational Research and Training has time and again prepared guidelines to make mathematics more and more practical in day-to-day use by young learners. Emphasis has not only been given to the pupil acquiring the required mathematical knowledge but also mastery of the basic mathematical skills and processes. For this Minimum Levels of Learning (MLLs) has been laid down as a pre-requisite for setting performance goals for the teachers. It also helps children to develop an understanding of various concepts and principles from the concrete to the abstract, from specific to the general.

MATHEMATICS has been an inseparable part of school curriculum ever since the beginning of formal education and it continues to be so. However, the mathematics curriculum has to undergo changes from time to time in accordance with the change in needs of the society.

NPE 1986 (Revised 1992) emphasized that mathematics should be visualized as the vehicle

to train a child to think, reason, analyse and articulate logically. Apart from being a specific subject, it should be treated as concomitant to any subject involving analysis and reasoning. With the recent introduction of computers in schools through the cause effect relationships and the interplay of variables, the teaching of mathematics will be suitably redesigned to bring it in line with modern technological devices.

National Council of Educational Research and Training (NCERT) conducted many workshops and seminars and developed guidelines with the help of school teachers for future mathematics programme in the country. The experts are of the view that the mathematics curriculum for primary stages (which constitutes the stage of universalisation of elementary education) should be confined mostly to the essential or functional mathematics required for day-to-day needs. The quality of teaching-learning should be given more importance and emphasis should not only be on the pupil acquiring the required mathematical knowledge but also achieving mastery of the basic mathematical skills and processes.

Achieving well-defined standards of learning by children in schools is a powerful success indicator of the system that works. It is in this context that the NPE 1986 (Revised 1992) emphasized the need for laying down MLLs for each stage of school education as a pre-requisite for setting performance goals for the teachers. This was visualized so that these could serve as effective guides for organising teaching-learning experiences and evaluating pupil achievement. It is an attempt at presenting a curriculum that will equip all children who complete primary education with the minimum essential learning outcomes that will enable them to understand their environment more meaningfully and to function as socially useful and contributing adults. The curriculum recommended here reduces substantially the load of information expected of a primary school child, thereby aiming at relevance, functionality and achievability of the learning outcomes.

Objectives of Primary Mathematics

Primary mathematics should help children to solve speedily and accurately the numerical and spatial problems which they encounter at home,

in the school and in the community. It should help children develop understanding of key mathematical concepts at each level through appropriate experiences with things from the physical world and the immediate environment. It should help children develop an understanding of various concepts and principles from the concrete to the abstract, from specific to the general.

Thus the curriculum at the primary stage should be such that a child should achieve the following objectives. The child should be able to

- use numbers,
- perform computation, with speed and accuracy;
- translate verbal statements (a) in mathematical form using appropriate symbols and (b) diagrammatically,
- make reasonably good approximations and estimate, measurements,
- apply mathematical concepts and skills to solve simple problems of day-to-day life;
- think logically;
- recognize order and pattern

It has been observed at primary stage that many children unfortunately start associating mathematics with boredom, drudgery, failure and fear. Many of the basic skills with which the child operates at the higher stage are developed during the primary stage. Therefore, it is essential that at this stage good foundation of mathematics be laid which can be done in different settings, individual, small groups and whole class. The role of teachers is eminent while transacting various concepts to the child. Efforts should be made by the teachers so that the child develops keen desire to continue learning. Activities adopted by teachers should be adjusted to fit the abilities of the children.

At the stage, the use of environment, play-way activities, low-cost teaching aids and well-planned workbooks does motivate children to learn mathematics with interest and understanding

There are no two opinions that the traditional single textbook approach is not adequate for effective teaching-learning. Instructional packages may consist of both print and non-print materials some of which may be used for slow learners.

The subject matter in elementary classes needs to be planned very carefully. Books on mathematical recreation have proved that the students feel more interested when there are number games. This helps to arouse the students' curiosity.

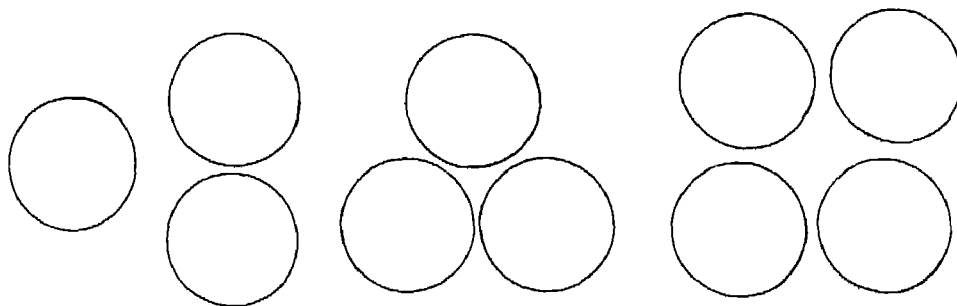
Children of elementary school-age must know how to count, how to measure, and how to use number symbols with a degree of skill

which grows as the children grow. These are the basic ingredients of quantitative thinking and power to do quantitative thinking i.e. power to think through problem situations involving number, is the over-all objective of learning mathematics. A child's growth in mathematical ability is a part of his total growth. This growth should be a consistent and gradual process.

Power in using mathematical skills must be developed step by step over a period of time. Textbooks and the Teacher's Guides are planned to help the teacher in developing a systematic programme for children studying in first grade who are learning to use arithmetic. Keeping in view the objectives of primary mathematics and the MLL in mathematics, the author of this paper has made an attempt to introduce mathematical concepts with suitable examples, to the children of Upper K.G. level. The author has long contact with the children at primary level.

<i>Area</i>	<i>Sub-area</i>
1. Understanding whole numbers and numerals	1.1 Counting from using objects and pictures and shapes 1.2 Recognizes numerals and matches numbers to numerals from 1-10 1.3 Identifies zero as the number representing nothing or the absence of objects in a collection 1.4 Expanding number 10-20 into tens and ones 1.5 States the place value of the digits in the numbers 10-20 1.6 Arranges numbers from 1-20 in ascending and descending order 1.7 Identifies the numeral before, after or between any numeral between 1-20 1.8 Compares number from 1-9 using words, 'more than' 'less than' 1.9 Writes the numerals from 1-20 in words and figures
2. Ability to add and subtract	2.1 Adds numbers 0-9 with sum not exceeding 9 2.2 Subtracts numbers from 0-9, to separate smaller number from a larger number and to find the difference between the two numbers 2.3 Interpretes and writes the symbol +, -, =.

Purpose : To Review Rational Counting

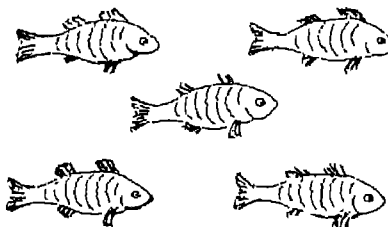


Instead of O we can have Δ , \square and \square

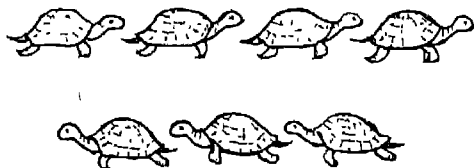
Purpose : To Provide Practice in Recognising Groups of 5, 6, 7, etc.



How Many in All _____



How Many in All _____



How Many in All _____

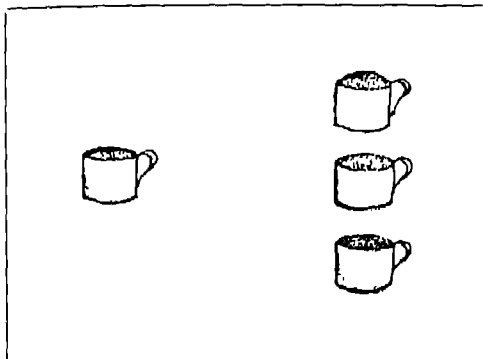


How Many in All _____



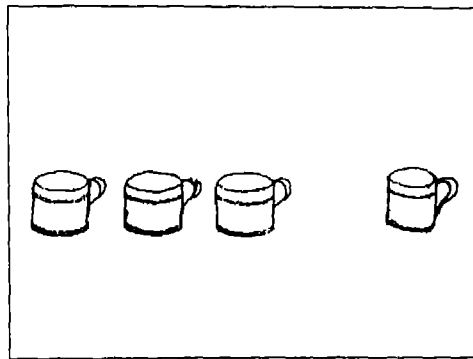
How Many in All _____

Purpose : To Provide Practice in Recognising Groups Similar in Size but Different in Arrangement



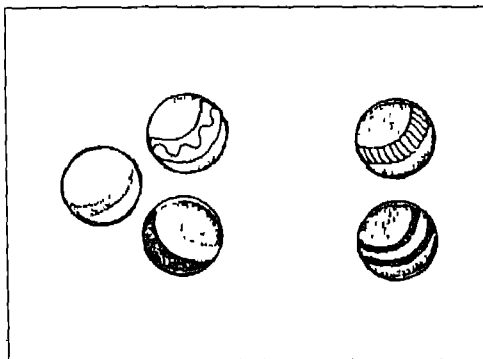
1 Cup

3 Cups



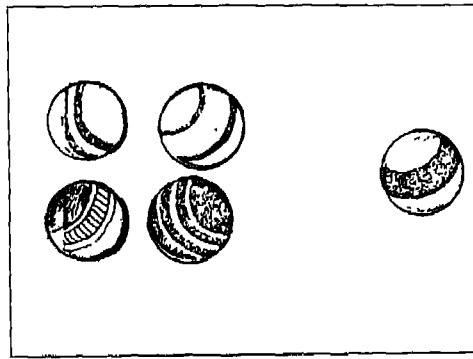
___ Cups

___ Cup



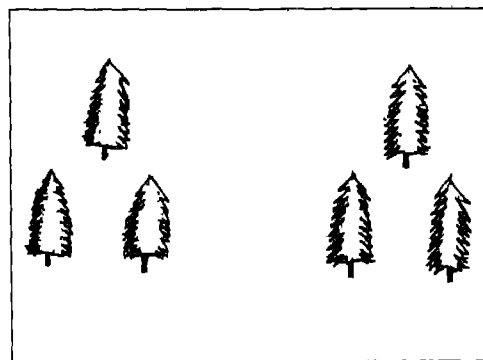
___ Balls

___ Balls



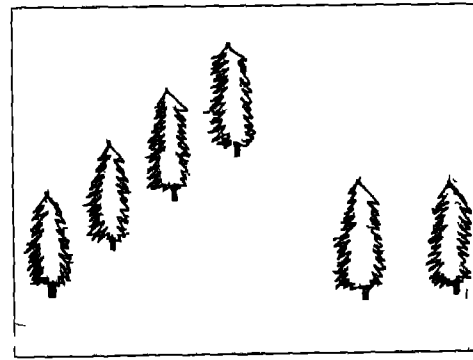
___ Balls

___ Ball



___ Trees









___ Trees



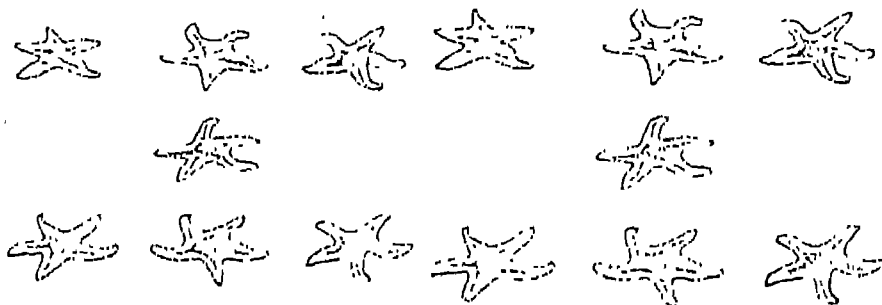
___ Trees

___ Trees

FOR PRACTICE

Draw Five	 S.	
Draw Three	 S.	
Draw Ten	 S.	
Draw Eight	 S.	
Draw Seven	 S.	
Draw Six	 S.	
Draw Nine	 S.	
Draw Four	 S	

Purpose : To Expand Numbers into Tens and Ones

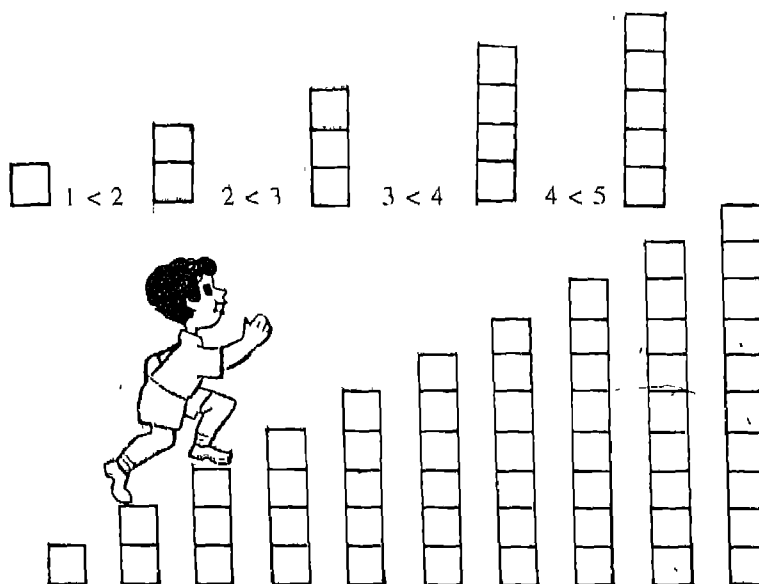


How Many in All ? 14

14 is 1 tens and 4 ones

We can have many more such examples with different interesting pictures

Purpose : To Introduce Concept of Less than and Greater than



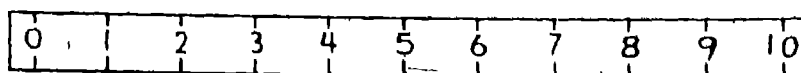
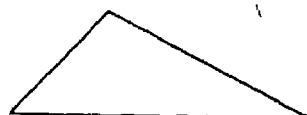
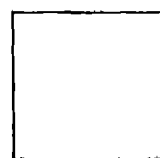
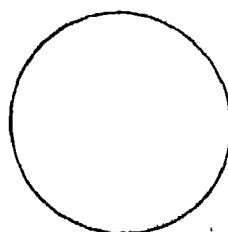
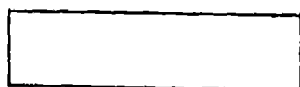
< Less than

1 < 2	2 < 3	3 < 4	4 < 5	5 < 6	6 < 7	7 < 8	8 < 9	9 < 10
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> Greater than

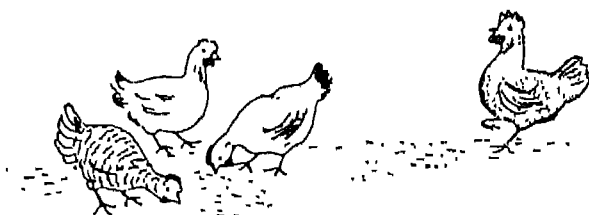
2 > 1	3 > 2	4 > 3	5 > 4	6 > 5	7 > 6	8 > 7	9 > 8	10 > 9
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Purpose : To Introduce Shapes



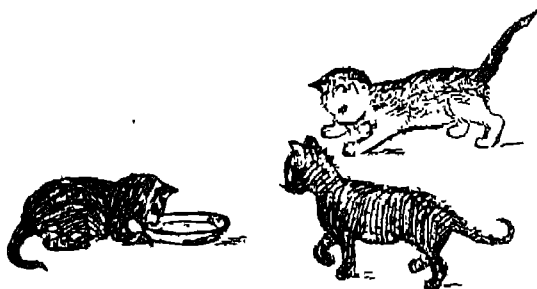
Purpose : To Provide Practice in Addition

How many are there in all ?



3 Hens
1 Hen
— Hens

3 Hens and 1 Hen are 4 Hens



1 Cat
2 Cats
— Cats

1 Cat and 2 Cats are 3 Cats

We can have more such examples

2 girls
1 girl
— girls

1 boy
2 boys
— boys

3 kites
1 kite
— kites

1 cat
1 cat
— cats

1 drum
3 drums
— drums

How many are there in all ?



1 Bee

and

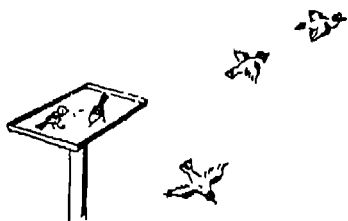


4 Bees

are

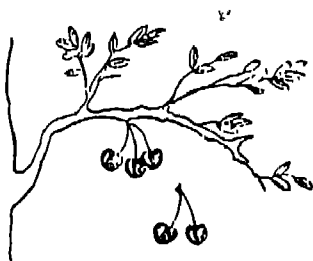
5 Bees

Purpose : To Provide Practice in Subtracting



$$\begin{array}{r} 5 \text{ birds} \\ 3 \text{ birds} \\ \hline - \text{ birds} \end{array}$$

There were 5 birds 3 flew away 2 birds left.



$$\begin{array}{r} 5 \text{ cherries} \\ 2 \text{ cherries} \\ \hline - \text{ cherries} \end{array}$$

There were 5 cherries 2 cherries fell - cherries left

We can have more such examples

$$\begin{array}{r} 5 \text{ birds} \\ 4 \text{ birds} \\ \hline - \text{ birds} \end{array}$$

$$\begin{array}{r} 6 \text{ seeds} \\ 3 \text{ seeds} \\ \hline - \text{ seeds} \end{array}$$

$$\begin{array}{r} 6 \text{ bees} \\ 2 \text{ bees} \\ \hline - \text{ bees} \end{array}$$

$$\begin{array}{r} 6 \text{ bees} \\ 5 \text{ bees} \\ \hline - \text{ bees} \end{array}$$

Newspaper in Teaching-Learning Process

M SWAMI
Senior Lecturer
E.T, D.I.E.T
Daryaganj, New Delhi

Newspaper has reflected our lives and life styles. It contains editorials, news items, thought of the day, reports, sport analysis, entertainment, events and schedules of different on-going programmes, views of critics, photographs, classified advertisements, weather forecasts and many more things of day-to-day importance. It is an inexpensive technique for reinforcing skills of knowledge, comprehension, presentation, analysis, synthesis and evaluation. As such it is a very good way of knowing one's surrounding world. Students should inculcate the habit of reading the newspaper daily as a routine matter. The author here suggests that this habit should be introduced at an early age and it may be considered as a part of school curriculum.

A NEWSPAPER is many things. It is a written market place for goods and services, it is an avenue for ideas and opinions, it is reflection of life and life styles. It is a written document containing all of these things, a document reflecting people and places. In many cases, the newspaper is also a source of endless learning experiences adaptable to any subject and any age.

The newspaper is an inexpensive means for reinforcing skills of knowledge, comprehension, application, analysis, synthesis and evaluation.

The newspaper has within it, many documents which can be used for a variety of learning experiences. These documents include pictures, maps, weather maps, prices of different commodities, matter related to population explosion and pollution. Students should get into the habit of reading the newspaper as soon as possible. If this activity is introduced at an early age and if it is interesting to them it may last long. The reading of newspaper should be considered as a part of school curriculum. Newspaper activities should not be organised

in isolation and continued to a limited period of time. In other words the newspaper should not be confined to a particular time. Students should be oriented as how to read the newspaper effectively. One way is to skim through the entire newspaper section by section, making note of any headlines which are of particular interest. The teacher should decide the objectives of using the newspaper. The teacher should see

- How the use of newspaper enhances student's learning ?
- How the use of newspaper will facilitate achievements of objectives of different subjects ?
- How the newspaper will generate interest ?
- How the newspaper will facilitate high level of learning ?
- What skills the students improve by using the newspaper ?
(Critical thinking, inferential skills etc)
- How the newspaper will generate interest in Geography, population, pollution, general awareness ?
- How the newspaper can be integrated into all subjects areas ?
- How the newspaper can help students improve their reading and writing skill?
The teacher should decide specific activities while helping students understand the concepts included in the syllabus of different subjects. The possibilities are endless.
- Students can identify and tell the significance of people or places photographed in the newspaper
- Different places mentioned in the news can be located on the world map
- Students can compile current events and write commentary on each event

- Students can analyse the advertisements
- Students can analyse the stories, editorials and write paragraph on different subjects
- Teacher should continually monitor student's progress, for this he/she should use interviews, progress file or some other techniques

Use of Newspaper in Teaching

To enrich the quality of life, education must generate curiosity, creativity, competence and compassion.

— DR ALBERT BAER

Education means bringing out talent, curiosity from the learner. According to the situation and demand of the lesson, teaching aid can be decided. Newspaper can be utilized as an assistance in teaching learning process. Newspaper is dynamic in nature. Current topics and information which are not available in syllabus, books and take time to come to the print media can be easily taught by utilizing the newspaper in teaching-learning process. Time gap and information gap can be filled by newspaper clippings in scrap books and updating these time to time. Updated news items can be the prime source for information. Newspaper brings outside world inside the school. Ninety per cent of news item can be used in teaching different school subjects. Here are some topics with lesson plan

Newspaper for Classroom Purposes

As newspaper is many things, utilizing teaching aid at primary level can be done for different subjects

1. Environmental Studies
2. Hindi
3. Mathematics

LESSON PLAN I

Subject – Science
Topic – Solar System
Class – VI

Behavioural Objectives – To enable the pupil to know about

- 1 No. of planets in the solar system
- 2 Motion of Planets
- 3 Planets (Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune, Pluto) distance, diameter, Wt, temp, time taken in completing one revolution round the sun

Teaching Aid – Newspaper cutting

Previous knowledge – Pupil knows

- 1 That they are living on the earth which is a planet
- 2 Light comes from the sun
- 3 They can recall that they see stars, moon in the sky at night
- 4 Soil, water, air are present on the planet earth

Introduction

- Where are you living ?
- Does the earth have lights of its own ?
- From where the light is coming to the earth ?
- What do you see at night in the sky ?
- What do you see in the sky during the day time ?

Black Board Summary

Presentation

Our solar system consists of sun, moon and nine planets

Look at the figure and note down the name in your note book

Now with the help of cutting given to you—Note—
(Photo copy given to the students)

Day temperature

Night temperature

Distance from the sun

Distance from the earth

Diameter

Time taken in one revolution

Rotation time

Maximum temperature

Minimum temperature

Note distance Which planet is nearest to the sun ?

Which planet is farthest ?

diameter Which is smallest ?

Which is biggest ?

Which planet is known as Morning Star ?

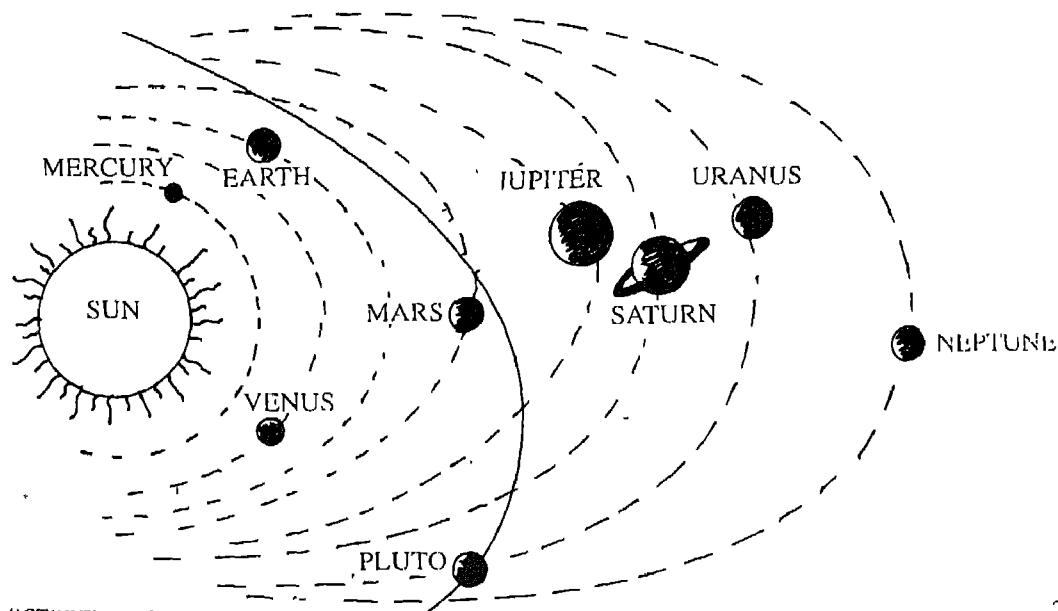
Which planet is known as Evening Star ?

Is sun a star or a planet ?

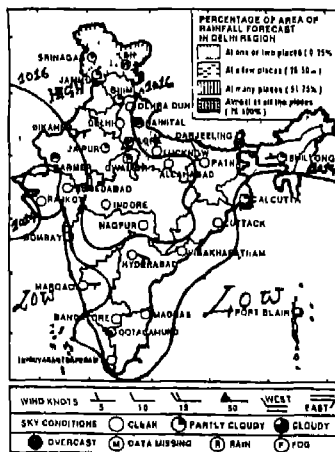
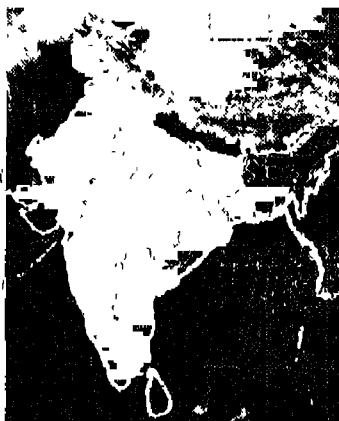
Is moon a planet ?

If no what is it ?

Assignment – Write main characters of all the planets



WEATHER



Insat picture at 11-30 hrs.

Observations recorded at 8-30 a.m. on March 5.

	Max	Min	R	TR
Allahabad AP	29	16	0	0
Amritsar AP	27	9	0	0
Bhuner AP	24	6	0	0
Chandigarh	28	13	0	0
Dehradun	26	12	0	7
Hissar	30	14	0	0
Jaipur AP	30	18	0	0
Jammu	26	14	0	0
Kanpur	28	14	0	0
Lucknow AP	29	15	0	0
New Delhi PLN	28	15	0	tr
New Delhi SFD	28	15	0	tr
Patiala	27	12	0	0
Shimla	16	8	0	2
Srinagar	16	3	0	4
Udaipur AP	30	—	—	—
Varanasi AP	31	15	0	0

The columns show maximum and minimum temperature in Celsius, rainfall during last 24 hours (tr-trice) and total rainfall in mm since Mar 1

Night Temperatures changed little. They were appreciably above normal in Rajasthan, above normal in Haryana, below normal in the plains of west Uttar Pradesh and normal in the rest of the region. The lowest temperature in the plains was 9°C recorded at Amritsar.

FORECAST (valid until Thursday morning). Rain or snow is likely at one or two places in Jammu and Kashmir. Weather will be mainly dry in the rest of the region.

Delhi				
March	SUN		MOON	
Calendar	Rise	Set	Rise	Set
Wed (06)	H.M. 06 42	H.M. 18 23	H.M. 19 25	H.M. 06 59
Thu (07)	06 40	18 24	20 21	07 35
Fri. (08)	06 40	18 24	21 18	08 14
PHASE OF THE MOON				
Last Quarter (12)			22 45	

LESSON PLAN 2

Class – III

Behavioural Objectives—To enable the pupil to know about

- Temperature
- Maximum and minimum temperature
- Record and relate the change in the timings of the sun rise and sun set
- Humidity – Knowledge about evaporation and water vapour present in the air

Teaching Aids – Cutting of few days weather report from newspaper

- Pre-knowledge** – They feel either hot or cold on different days
- Feel difference in hotness in morning time, noon time, evening time
 - Pupil know that clothes get dry soon in summers than in rainy or winter season

Introduction

On a summer day when do you feel pleasant ?

What do you feel in the evening hot or pleasant compared to the noon time ?

In the morning or at noon time ?

Presentation

We feel hot in noon time, and pleasant in the evening or morning i.e. temperature which is the measure of hotness is high in the noon time compared to evening or morning

See the cuttings

High temperature is known as maximum temperature
Low temperature is known as minimum temperature

Note the temperature difference of every day and conclude which day is hottest. Water gets dry soon when temperature is high and goes to the atmosphere in the form of water vapour

Humidity is the amount of water vapour present in the air on different days, the humidity changes

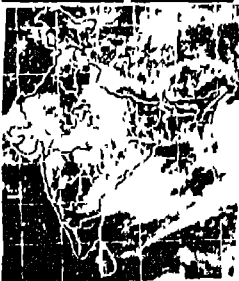
Recapitulation

- 1 When is the temperature highest morning/noon/evening
- 2 High temperature is known as _____
- 3 Low temperature is known as _____
- 4 Water gets _____ soon when temperature is _____
- 5 Humidity is the amount of water vapour _____ in the air

Assignment

Enlist the sun rise and sun set timings of 30 days and note the difference

मौसम 09.08.94



वायुमंडल की स्थिति का उपग्रह से लिया गया चित्र
नई दिल्ली

तापमान : अधिकतम 34.8°C न्यूनतम 26.1°C
आर्द्रता : अधिकतम 95 प्र.श. न्यूनतम 54 प्र.श.
दुर्गमता : बुधवार सायं 7.03 बजे
दुर्गमता : बुधवार प्रातः 5.48 बजे
दुर्गमता : राजधानी में कम बुधवार को
आममान में बादल छाए रहेंगे। दिन में कुछ
स्थानों पर बारिश व गरज के साथ बौछारे पड़
सकती है। पिछले 24 घंटे के दौरान नगर में कुल
42.6 मिलीमीटर वर्षा रिकार्ड की गई।

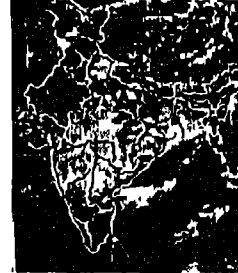
मौसम 10.8.94



वायुमंडल की स्थिति का उपग्रह से लिया गया चित्र
नई दिल्ली

तापमान : अधिकतम 28.8°C न्यूनतम 25.1°C
आर्द्रता : अधिकतम 97 प्र.श. न्यूनतम 85 प्र.श.
दुर्गमता : बुधवार सायं 7.04 बजे
दुर्गमता : बुधवार प्रातः 5.49 बजे
दुर्गमता : राजधानी में कम बुधवार को
आममान में बादल छाए रहेंगे। दिन में बारिश
होने व गरज के साथ बौछारे पड़ने की सम्भावना है।
पिछले 24 घंटे के दौरान नगर में कुल 89.3
मिलीमीटर वर्षा रिकार्ड की गई।

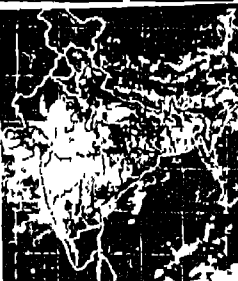
मौसम 11.8.94



वायुमंडल की स्थिति का उपग्रह से लिया गया चित्र
नई दिल्ली

तापमान : अधिकतम 31.2°C न्यूनतम 25.2°C
आर्द्रता : अधिकतम 97 प्र.श. न्यूनतम 77 प्र.श.
दुर्गमता : बुधवार सायं 7.03 बजे
दुर्गमता : बुधवार प्रातः 5.49 बजे
दुर्गमता : राजधानी में कम बुधवार को
आममान में बादल छाए रहेंगे। दिन में एक या
अधिक बार बारिश होने व गरज के साथ बौछारे
पड़ सकती है। पिछले 24 घंटे के दौरान नगर में
कुल 2.9 मिलीमीटर वर्षा रिकार्ड की गई।

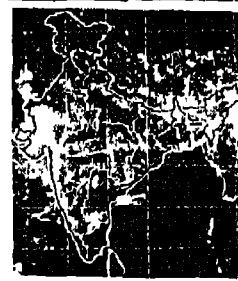
मौसम 12.8.94



वायुमंडल की स्थिति का उपग्रह से लिया गया चित्र
नई दिल्ली

तापमान : अधिकतम 32.2°C न्यूनतम 25.8°C
आर्द्रता : अधिकतम 95 प्र.श. न्यूनतम 73 प्र.श.
दुर्गमता : बुधवार सायं 7.03 बजे
दुर्गमता : बुधवार प्रातः 5.50 बजे
दुर्गमता : राजधानी में कम बुधवार को
आममान में बादल छाए रहेंगे। दिन में कुछ
स्थानों पर बारिश होने व गरज के साथ बौछारे
पड़ने की सम्भावना है। पिछले 24 घंटे के दौरान नगर में
कुल 8.3 मिलीमीटर वर्षा रिकार्ड की गई।

मौसम 13.8.94



वायुमंडल की स्थिति का उपग्रह से लिया गया चित्र
नई दिल्ली

तापमान : अधिकतम 33.7°C न्यूनतम 25.7°C
आर्द्रता : अधिकतम 95 प्र.श. न्यूनतम 66 प्र.श.
दुर्गमता : बुधवार सायं 7.02 बजे
दुर्गमता : बुधवार प्रातः 5.50 बजे
दुर्गमता : राजधानी में कम बुधवार को
आममान में बादल छाए रहेंगे। दिन में कुछ
स्थानों पर बारिश होने व गरज के साथ बौछारे
पड़ने की सम्भावना है। पिछले 24 घंटे के दौरान
नगर में कुल 28.0 मिलीमीटर वर्षा रिकार्ड की
गई।

A Week with Mrs Fanny Brown

SUSANTA K. SARANGI

TGT English

DAV Public School

IB, TPS, Benharpali

In the name of 'public school' certain people are exploiting English medium schools, especially nursery schools. Many of these schools are neither well equipped with aids and audio-visuals nor are teachers proficient in modern methods of teaching. Some of the schools even run in hired buildings with only a sign board to their credit. They cheat parents in the name of quality education in English medium. The present article is a learning outcome of the author's experience. Here Mrs Fanny Brown, is an imaginary figure in the guise of a nursery teacher working in Heaven Garden School and a model for every school teacher. The author has beautifully described the week-long activities of Mrs Fanny Brown and how she helped her young students throughout.

I WAS quite fortunate to meet Mrs Fanny Brown, an Anglo Indian lady who was working as a nursery teacher in the Heaven Garden (A school for tiny tots). She was 5.8 feet tall, dressed with a colourful saree, with a mother like appearance. Her charming personality blended with a sweet smile on her beautiful face attracted the children in her classroom. I felt as if the little kids would be dreaming her in their nap. Some of my moments in her classroom brought about in me a rich and memorable experience. I thought of Fanny always when the topic "teaching learning

situation for nursery children" came up for discussion.

It was 7 o'clock, Monday, in an early spring when I first visited Fanny. I saw her guiding the kids in a queue. They all had a brush with some tooth paste on it in their right hands and a tongue cleaner on their left. I watched them going to the bathroom and coming back after 7/8 minutes to their classroom. I was astonished but Fanny informed me that they were taught how to brush the teeth, clean the tongue, clean their mouth and wash their face even comb their

hair in front of a mirror I was enchanted. She sometimes even took them to toilets and taught them how to use it. I could easily understand that these activities and talks helped the little lads to develop proper health habits. She called one of the kids, gave him some paper plates and instructed him to distribute among them, another came and served the biscuits, the other provided each of them with tumblers, the next poured water into the tumbler. When they all finished eating, Fanny was simply supervising. She took them near the basin and they washed their hands properly. Later on, I could know that these activities were a part of their learning. They cleaned their furniture and blackboard, polished their shoes, washed their handkerchiefs, even watered the plants kept inside the classroom. These habits taught them independence, self help or self reliance. Fanny took them outside to give them opportunity to climb, jump, slide, pedal or swimming while playing. All these activities were done to foster their muscular growth. When the final bell rang, they all got ready with their satchels, made a queue, said 'good bye' to Fanny and got into the van waiting for them, without rushing or pushing each other. I thought Fanny would leave the school but she was never in hurry to go home. She wrote something in her daily diary, pupil's records and then started repairing tricycles. She prepared herself for the next day by ensuring the cleanliness of her classroom, by making a lump of a clay and by preparing some colours for use next day.

It was Tuesday and I reached the school 15 minutes before. Fanny had already reached the school. I saw her busy in making an activity-plan, examining the lump of clay, the brushes and colours to be used. She often talked to an early comer on what breakfast the child took and many other things. Fanny wished those kids 'Good morning' who didn't wish her and gave

a sweet smile. Fanny told them stories of animals and birds. She started crawling, creeping and wriggling before them. She mewed, barked, growled and chattered before them. She showed them some pictures of animals and birds. She showed them a cartoon film which was from Aesop's fables. She told them a story from 'The Panchatantra'. She encouraged them always by asking what happened next. She sometimes played the role of the lion or the deer while relating the story. She allowed them to talk with each other freely. She encouraged them to act on the story creating a role play situation.

Fanny was clever really to make the classroom lively. She gave each of them a lump of clay to make any shape of an animal or a bird. They all were engaged in such creative activity. Her supervision, alertness and smartness was worth praising. She encouraged students to share their tiffin. When such an activity was going on, she was prompting them to use 'please', 'thank you' etc, in their way of talking. Nobody said 'No', nor showed his/her reluctance in sharing the tiffin, nor pencil box. I was astonished and Fanny explained me that children did not have emotional controls or sense of acceptance. But they should be properly guided to express themselves freely, understand, accept and control their feelings as well as emotions.

Next day was Wednesday. I was a bit late. So I discovered Fanny with her children inside the school garden. She had lost herself with the children enjoying the beauty of the garden. She was naming the flowers and inquiring the liking of the kids for the flowers. She was identifying colours and bringing relationship with a flower in her own words. This is a red rose. It is beautiful. I saw her following a butterfly with the children. She was playing and dancing with them. These activities were to encourage aesthetic appreciation in them. Fanny took them

inside the classroom and showed them a flower with a butterfly on it painted colourfully on a chart paper. She showed them a number of beautiful pieces of art. She played a video cassette displaying different colourful flowers, fruits, insects etc. She had brought some lively insects in a bottle with her to the classroom. She explained them. This is a house fly. This is a mosquito. Fanny gave each of them a chart paper (12 cm × 10 cm), a brush and different colours to draw and paint freely anything they like. Most of them tried to copy out the picture hung on the wall. She encouraged them tearing, cutting and pasting besides drawing and painting. Fanny collected those pieces of art and the bell rang for the children to go home.

On Thursday, the sky was cloudy and suddenly it started drizzling when I reached the school. Fanny took her children out to show them how it was raining and why did the sun disappear. She explained in very simple and lucid language. She sang nursery rhymes and danced with them. The children enjoyed a lot of fun with the teacher. She took all of them inside the classroom then and showed them five to six bottles of different size that contained water of different colours. She poured from the small to the big one. While explaining and helping them to identify colour and quantity of the water in the bottle, I felt as if she is teaching them mathematics and science. She frequently used the words like big, small, few, a little, more, red, blue, green, black, brown etc. She brought out some chocolates and biscuits from her bag and started comparing their quantity. She frequently used the words like light, heavy, long, short, small, big, more, few, some, many, one, two etc. Moreover, I had watched her earlier taking the children to the orchard where she had showed them some leaves, flowers and fruits. She frequently used green leaf, red rose, blue sky, yellow mangoes, black hair etc.

Friday was the last working day for Fanny in schools. So I could not but resist to know, what she would teach on that day. But she was not in the school. She had accompanied all the children to the hospital. I thought something else. But when I met there, I saw her taking them to the doctor and giving them a wonderful experience of how a doctor uses his stethoscope, thermometer etc. Then I followed them when they went to the nearest market complex. She gave each of them some money and they all started buying what they liked. Some had bought balloons, some had bought kites and some chocolates. Finally, when we went back to school again, she told me that they had been taken to a post office, a saloon, a laundry and a zoo earlier. She even took them under a tree to show a bird's nest or an ant's hole. Now she flew kites, showed them a pencil box, a ball, a kite and a playing card. She used these things to explain them different forms and size. She helped them to discriminate them. She showed them a piece of wood, an elastic, a rubber band, a thread and other things to introduce them the concepts: large and small, long and short, heavy and light, thick and thin, wide and narrow, round and triangle etc. One thing, I could never forget was that the children could distinguish a doctor, a postman or a police from their uniforms in the picture after visiting them. They could learn about the food and habits of different animals after visiting the zoo.

While visiting these places, Fanny had taught them how to cross the road or watch the traffic lights. While feeding them, she had taught them the words sour, sweet, bitter, strong, salty, cold, hot etc. in taste. They could smell different things and identify things from their smell recollecting their experiences. Fanny had played picture cards to acquaint them with all the letters of the alphabet and the words used for the letter ('A' for apple). Sometimes Fanny would show them how a piece of ice changed into water,

how they feel one end of a spoon hot when another end is heated

Saturday and Sunday were holidays for the children. So on the last day of the week, Fanny was always telling the children, today is Friday, tomorrow is Saturday. Saturday is a holiday Day after tomorrow is Sunday. It is also a holiday. Come on Monday, when she used these sentences, children completed and repeated the sentences as if they had been acquainted. But Saturday was never a holiday for Fanny. She never came to school on that day but spent at least six hours visiting her children and their parents. She watched them and noted down their behavioural problems in their house with parents.

One doubt, I had in my mind, how did Fanny evaluate her children? I asked her to satisfy my curiosity. She explained me that evaluation was done through observation on their behaviour, their experiences in listening, interacting with others, fastening things, measuring things, dramatization, singing, drawing etc. Spontaneous drawing, copying, tracing, filling and completing are different activities which are given for evaluation. Number games, identification and description of objects, colour etc. are items used in testing and evaluation. She examined them on a number of questions that she had recorded in her diary. For example:

- (a) Is he able to cut shapes, copy out figures?
- (b) Can he throw or catch a ball?
- (c) Is he ready to go to school?
- (d) Can he recognise different forms?
- (e) Can he differentiate between different sounds?
- (f) Can he keep large to small things, long to short things in order or vice versa?
- (g) Can he identify the names of different colours?
- (h) Can he express fluently and accurately?

- (i) Can he follow when something is read out or spoken to him?
- (j) Can he know of his environment and objects around him?
- (k) Is he able to adjust himself with his friends, relatives or a stranger?
- (l) Does he behave properly?
- (m) Is he able to understand the happenings around him?
- (n) Can he describe a picture in few words?

Before leaving the classroom, I took a view of the classroom. Some charts, posters, paintings, nursery rhymes and pictures on the wall caught my attention. Still I remembered the line that appealed to me. Never stop them talking. They have come here to learn talking. I have seen my teacher friends shouting at the children, 'keep quiet', 'stop talking' or 'Don't shout', I felt it was injustice to the little kids. Fanny had written 17 lines on a chart paper in bold letters in her own handwriting and she pointed her finger at it so that I would read them. It was worth learning.

Parents and Teachers to Remember

- 1 (Q) When does a child learn to condemn others?
Ans. When others criticise him
- 2 (Q) When does a child fight with others?
Ans. When he feels hostile with others
- 3 (Q) When does a child feel sorry for himself?
Ans. When others take pity on him.
- 4 (Q) When does a child feel his mind with apprehension?
Ans. When he lives with fear
- 5 (Q) When does a child feel shy?
Ans. When everybody ridicules him

6. (Q) When does a child become envious?
Ans. When others are jealous of him.
7. (Q) When does a child feel guilty ?
Ans. When he lives with shame.
8. (Q) When does a child feel confident?
Ans. When somebody encourages him.
9. (Q) When does a child learn to have patience ?
Ans. When others tolerate him.
10. (Q) When does a child appreciate others?
Ans. When others praise him.
11. (Q) When does a child love others ?
Ans. When he is accepted everywhere.
12. (Q) When does a child like himself ?
Ans. When others approve of him.
13. (Q) When does your child fix his goal?
Ans. When he lives with recognition.
14. (Q) When does a child understand truth and justice ?
Ans. When he is allowed to live with honesty and fairness.
15. (Q) When does a child have faith in himself ?
Ans. When he is secure and safe.
16. (Q) When does a child feel that the world is a beautiful place for him to live in ?
Ans. When he develops friendship with others.
17. (Q) When does a child have mental peace ?
Ans. When he lives with serenity.

Dropouts : An Observational Analysis

GOBINDA, CH. PAL

Post-Doctoral Fellow

Tata Institute of Fundamental Research
Bombay

Based on the field experiences as well as limited survey on the District Primary Education Programme (DPEP) in South Orissa, the paper attempts to analyse and explore the linkages between socio-psychological factors and dropouts of primary school children. Although, questions regarding their relationships are not new, however new approaches for inquiry are taken. The paper addresses the questions at analytical level. The modalities of the discussion revolve around the questions of whether they are 'dropouts' or 'pushouts'. An appraisal presentation argued in favour of 'pushouts' edging over 'dropouts'.

DURING last 47 years of Independence, India has achieved a tremendous growth of education both in terms of educational institutions, students and teachers as well as variety of educational activities representing one of the largest education system in the world. Side by side, it has the dubious distinction of having world's largest number of out of school children. A whopping 22 per cent in the world's total out of school children and 30 per cent of adult illiterates are in India. According to the World Bank estimates, by the year 2000 A.D. the country will have about 55 per cent of the world's illiterate population in the age group of 15-19 years.

The progress, whatever, achieved is only in quantitative term. Satisfactory progress regarding improvement in the quality of education as a whole could not be achieved despite serious attempts made by the Central and State governments. The goal of Universalization of Elementary Education (UEE) which was envisaged in the Constitution of India itself to be achieved by the year 1960, still remains a dream. The main reasons for this are the high dropout rates (Class I-VIII) which is about 75 per cent. This rate is much higher among girls and weaker sections of the society. The greatest challenge that the country today is facing is to reach the goals of Education for All (EFA).

The Eighth Five Year plan by pushing back the major programmes campaigned for the District Specific Plans, formally recognized District Primary Education Programme (DPEP) launched in 1993 as a major instrument for achieving UEE. DPEP seeks to operationalise the National Policy on Education (NPE) and Programme of Action (POA) strategy of achieving UEE. Highlighting the agenda of the Education Department for 1994-95, the major initiative is taken on the implementation of the DPEP. Ground level preparations have been completed in selected states. Research studies on the status of primary education have been explored and shared in order to reconstruct the primary education. The District Project Plans have been formulated based on the ground realities.

No doubt ground realities examined through surveys are enough for a strong base, the experiences through active participation during course of action can supplement and have additive value for the diagnosis of specific problems. When DPEP emphasises on quality education, the genesis of quality observations may be equally or more meaningful than the appraisal of systems through reliable quantitative figures. When multifarious factors influence the cognition of individual in an integrated manner, understanding the behavioural pattern in a system would provide insight towards the source structure that pushout the participants to periphery. When DPEP focuses on reducing overall dropouts in primary education to less than 10 per cent for all students and to less than 5 per cent between boys and girls as also for disadvantaged social groups, subjective report should be supplemented by objective observation and understanding. A central belief should be that information alone does not change behaviour, experiential learning should involve action. The experiences should be processed in order to understand what cause an unsatisfactory

outcome. Working through one's feeling and reaction reflectively is crucial.

Assumptions

It was visualised that the school children constituted three different groups differing from usual categorization of two-school goers and dropouts. Of course, the general idea of two segments is true, if compartment is tightened, but may not prove in continuum. Perceptually, a third group was figured out for the experimentation, but not in a formal way.

It was thought that one group is already in deep sea (dropout), other is in shore (regular school going children) but another in a floating boat (irregular school going children), which was highly common feature in most of the rural schools (usually tribal area schools) of South Orissa. What distinctives are observed with them? How do they feel? How they perceive the Education System? What type of attitude they carry on? Are they really different from dropout? Is there any sense in their cry? These only could be examined in relation to subjective reports of dropouts, those have been composed in terms of simple mathematics. Here, it is not argued on the validity of mathematics or psychology. But the question is, are the so called dropouts 'dropouts' or 'pushouts'. From the observational analysis, it was assumed that they could be maximally 'pushouts' and minimally 'dropouts'.

The documentary evidences point out that dropouts are mainly due to pressing socio-economic compulsions (DPEP Reports, Orissa, 1995). Among others, the causal factors of 'earning for livelihood' or 'assisting parents in work' or 'parents do not want', were most prominent. While boys report revolves around 'earning for livelihood', girls leave on 'parents' willingness'. These were not exceptions to any social category.

What experimental group (irregular attendant) report? Is there any vitality of the reports? Much could be extracted and extended towards understanding the problems of dropouts that seriously besiege the primary education system. Whatever were surfaced mainly revolved around the low holding power of schools, teachers and curriculum, thus, pushing them out for evening, midnight and lastly overnight. Today's irregular, tomorrow's dropout, simply by detachment, alienation, habituation and parents' devaluation.

Socio-economic factors as the cases of isolating several segments of population from educational stream have been extensively documented. It has been investigated that the financial condition is a prominent reason of dropout on which nobody can cut much ice. The deep-rooted prejudice against girls going to school is yet another malady not easy to surmount. The parents' illiteracy and devaluation of education have become another concern of programming. When so many negative forces are working hand in hand against the ideal, what best alternatives could be thought of? This paper finds the alternatives within the education system. The right perspectives and some practical priorities are suggested to be the best among others.

Joyful Experiences

As observed the schooling has become inflexibly institution bound and the process of education has been reduced to prescribed instructions resulting into a large number of non-enrolled. To reach the first base in the total operation of UEE, the enrolment and retention, learning centres and learning process should be joyful and productive. The majority of school goers are made to view learning at school as boring, even unpleasant. The schools, therefore, are to be fundamentally reorganized as pleasurable and

purposeful self learning centres for the children.

No doubt, school imparts learning but learning often does not reach its optimum level in terms of expectations and sometimes does not occur at all. This is because of lack of congenial atmosphere and joyful experience to the young learners. This might be due to a number of factors such as infrastructural facilities in schools, the curriculum, the teacher behaviour, pedagogical practice, socio-political factors of the community, etc. Children may come to the school regularly if they find that learning process is enjoyable and attractive. Financial and non-financial incentives are poor substitutes to good and enjoyable learning in the classroom. Varieties of activities and action oriented programmes are to be provided to the children for joyful learning. These activities should be carefully planned to provide for both cognitive and non-cognitive learning experiences. These can relieve the children of the monotony, boredom and burden of learning. As observed, few schools even in remote villages maintain a daily attendance of about 95 per cent children simply because the teaching instructions and explanations are accompanied by demonstrations, models, clear blackboard work and visual aids of many kinds, even the role play by children themselves. Experiments and direct observations by the children will provide a better basis of learning than listening the wordy explanations, which involve abstract ideas.

Teacher: The Model

In the perceptions of sociologists and psychologists, teacher can act as a best agent of socialization process, as they are given a formal platform to help the children in internalizing the values. The quality of education, is therefore to a large extent dependent on the quality of

teachers. It is very common to notice that teachers perceive their primary responsibility to impart a prescribed body of knowledge. This could help teachers more than students in becoming expert in the curriculum. Teachers while teaching in rural schools, the students of which are a long way deprived, need to possess great patience, perseverance, a sense of humour and a genuine interest in the profession. They should take special interest to make an inquiry into the reasons of under achievement and need to be resourceful in using a series of new approaches to the same problem and in making frequent repetitions of principles with a variety of material to ensure the continued interest and progress of the children. Instead of being sentimental, they should be sensitive to specific problems.

He can be a good teacher who not only know his/her subject but also knows his/her pupils. As evident, most of the teachers have in their minds some misconceptions about learning and its impact on teaching. Most teachers complain that some are passive, possess no innate ability to learn, nothing could be possible for them, unattractive etc., leading to discriminatory behaviours on the part of teachers. Even being subject to fundamental bids, the teacher perceives him/her a good pupil because he/she is a son/daughter of educated person or influential person or associates. This indifferent face of a teacher sometimes can be harmful and a subject of anxiety producing in minds of the children than use of corporal punishment. It systematically and gradually kills the spirit of the child to identify with teacher, his/her teaching and eventually fails to inject anything. Teachers, therefore, need to be more positive, regarding, encouraging, considerate, caring rather than dogmatic and rigid.

The most shocking aspects that are found pronounced in elementary stage is 'teacher

absenteeism'. When country strains every nerve to retain the children in stream, the teachers absenteeism fires from the back. Perhaps, they give their attendance to local education officer who stands as a saviour rather than supervisor. The factors associated with this are political nexus, commissionary contact and more obvious are the school distance and community unconcern. Teachers without performing the assigned duties, are found busy and productive. So, nothing could be said on his sincerity and honesty, as a person in society. As one puts "Is there no schools in my area? Why shall I be kept away from family?" Other puts "if school is in paper, my salary will flow here, why shall I bother?" No doubt, teacher is no way loss, but creates a momentum where enrolled children are forced to be pushed out. Official supervision and community involvement thus lack.

Diversity and Identity

Traditional customs, beliefs, values etc. are much more pervasive among the rural people. The socio-economic, political and cultural background of rural mass make a lot of difference in their bringing up in the socialization process. This background reflects in many forms and creates a peculiar mental make-up. Even the parents cannot make an attempt in improving the situation because they themselves are a prey to the vicious circle. This distinct identity mostly reflected through the cultural identities in the human society. Moreover, in the tribal dominated South Orissa, the pictures of cultural affiliations are exemplary. Schools mostly populated by tribal children are ground to examine how the education system lacks curriculum and instructional strategies which can be effective for children of multi-cultures. Teachers, through in-service and pre-service training courses enhance their proficiency and competency in teaching but no

way the social competence which can help him to adopt and adjust in a diversified situation.

The state language is recognized as the medium of instruction. But what happens in tribal schools or school dominated by tribal children. Can the teacher make group on the basis of mother tongue to take separate classes? Since the tribal children are in majority, can the teacher use the tribal language, in case he knows? If one teacher knows, other does not, then what would be the function of later? There are peculiar problems in some regions which are one way or other pushes a few out of the stream, at the very inception.

The cultural elements of different groups remain as possible bases for identification. It becomes so pronounced that they become less sensitive to the 'National System of Education'. Since the curriculum contents do not reflect the social and cultural experience, the rural children, mainly disadvantaged group develop apathy towards education system and it matters in their dignity and identity. Consistent with this parents identification with education is also important. Since economy is a greatest hurdle in life, the need of immediate utilization of the children for the livelihood remain basic. With limited financial resources, it is really very difficult on the part of state to compromise with their economy. So what needed really is motivation of parents through some incentives or integrating other benefits with sending of children.

In society where multi-cultures play an important role, a common pattern of education system may be less useful. It is time to understand shared values of society as a whole as well as to appreciate the diversity of life systems. The need of the hour is the preparation or presentation of the educational programmes based on the desires, that the children of a specific culture would not be subject to identity problem. Alternatively, to compensate the

cognitive deficits and dysfunctional characteristics, which are resulted by deprivation of a rich culture, a behaviouristic and compensatory educational programme could be introduced. To enable them to acquire the values and behaviour of the mainstream culture educational programme could be based on assimilationist's assumptions and goals.

In the context of multi-culture classroom situation, the role of teacher could be highly recognised. How far school can accommodate the diverse abilities and interests of a heterogeneous population depends very much upon the style of teaching and preparations of classroom situation of the teachers. But the teachers fail to take into account students' diverse backgrounds and experiences fostering academic failures. The lack of understanding the culture by teachers causes difficulty in communication processes leading to loss of personal and cultural identity and by the way the self-esteem and performance among culturally disadvantaged children. All these problems invite specific strategies and techniques that would enable teacher to assist students of culturally diverse backgrounds.

Management

Recognising the need of accommodating the country's diversities, the area specific approach is designed to solve local problems with available expertise. With a state of optimism, it may lead to dishearten, if the state of school systems of South Orissa is assessed. Lackings are not in infrastructural facilities or number of teachers, rather in proper supervision and management of resources. It may be unbelievable but the fact that the number of schools which are functioning in a real sense may be 50 per cent of the schools in paper. Even the cases are there where schools do not exist but in school inspectors' knowledge,

teachers are regular receiver of monthly salary. What roles the inspector can play, if he is not able to spot out the location of village school? Does he inspect the school on paper only? Even schools are found not for schooling but generous for providing a common platform where even the students are perceived as a secondary member. Thus, more exhortation to 'all teachers to teach and all students to learn' will not produce any result. A new climate and a new mind set have to be created for much radical changes in the schools management system.

Conclusions

Keeping note of these dynamics, it could be assumed that the serious cry from every corner of country even from outside on the target of 'education for all' may be remote possibilities. It could be realised that factors those pull one out of stream could not be controlled much as they are culturally rooted but the factors which produce demotivation, detachment, alienation, lower self-esteem and loss of identity and ultimately push the school-goers out of stream, should be emphasised. In order to substantially increase the holding power of the school, the schools should be the centre of the community and the schools community should emerge through a variety of activities and programmes.

School could be accountable to community and the community becomes aware of its role and responsibilities towards school. The schools should be a cultural environment where acculturation takes place. It is important to understand 'how children are receptive and responsive rather than remissive'. It is a prime requirement of teachers to take the onerous task of building up the positive work culture among the students at their budding age they spend in school. They should become role models with dedication and commitment to enable students to inculcate positive values and attitudes relating to work.

Teachers' efficiency, involvement and communication process are more important than the simple number of teachers. The teachers should be sensitive to cultural differences and should have knowledge and skills to adapt their educational practices according to individual needs which should be the basic objective of Teachers Training Programme. The supervision of concerned persons could not be neglected. To sum, a greater importance should be given to incorporate a life in schools and to coordinate the student's experiences and motivational forces and more specifically, children are to be psychologically prepared to receive formal education taken to their door.

Radio Broadcast for Primary School Children

AMARENDRA PRASAD BEHERA
Junior Project Fellow
DPSBE, NCERT, New Delhi
Lecturer, CIET

Radio is an effective audio aid which is capable of providing valuable assistance to the teacher in the classroom by presenting enriching and entertaining learning experiences simultaneously to a large number of students. It can penetrate not only distance but can also cross the barriers of languages, religion, customs and rituals. It is neither time bound nor place bound. Keeping in view the success story of "Radio Feasibility Study" conducted in Kota (Rajasthan) and the extension of CHEER Project in Andhra Pradesh, Haryana, Orissa and Uttar Pradesh, the author of this article attempts to draw the attention of people and the Government working at primary education level to adopt radio medium which can face the challenge of reaching the pupils in very nook and corner and cover the remotest hilly and tribal areas of our country

INDIA, the largest democracy of the world is only second to China in its population i.e. 84.6 crores (Census 1991). After 47 years of Independence it has been able to achieve only 52.11 per cent literacy (Census, 1991) while its Asian counterparts like China, Malaysia, Philippines and Thailand have crossed the threshold by achieving cent per cent literacy. In this regard Dr. K. G. Saiyidain, one of the architects of education in post-independent India has very rightly remarked, "If someone were to prepare a literacy map of the world and colour

illiterate areas of the earth black, India will, to our shape look like a dark continent".

In a developing society like ours one has to take into account not merely the needs of a growing economy but also those of a new culture that would reflect the spirit of a dynamic, liberal and growth oriented society.

If education has to play a significant role in a society, it has to assist in the creation of new values and attitudes in place of the old so that the obstacles in the path of modernization may be removed. For this it is necessary to

realise that the foundation of elementary education must be firm and broad-based.

Provision of free and compulsory education to all children until they complete the age of 14 years is a Directive Principle of Indian Constitution. Since 1950, determined efforts have been made towards the achievement of this goal. Over the years there has been a very impressive expansion in the provision of educational facilities and enrolment. As a result, universal provision of educational facilities has been substantially achieved at the primary stage (Classes I to V).

However, Universalisation of Elementary Education in its totality is still an elusive goal and much ground is yet to be covered. Also dropout rates continue to be significant, retention of children in schools is low and wastage considerable. In 1985-86 dropout rates were 47.93 per cent in Classes I-V and 65 per cent in Classes I-VIII. Despite increased participation of girls, gender disparity still exists.

Besides, the launching of Operation Blackboard scheme, Government of India have introduced many innovations in this area. But it can be logically reasoned that at macro level financial constraints aggravated by population explosion, gulf widened between availability and accessibility, inequality of opportunity owing largely to socio-economic disparities and more specifically in context of remote, desert, hilly and tribal areas and failure to provide adequate work ethics are among the major stumbling blocks in achieving the free and compulsory education for all.

At micro level the non-availability of teachers in remote areas and lack of periodic monitoring of their duties, poorly trained, less equipped and unmotivated teachers and unstimulating school environment have created alarming rates of dropouts in the schools.

In order to bridge the gap between rich and poor, urban and rural, skilled and unskilled,

interesting and disinteresting methods of teaching, the role and importance of electronic media i.e. television, slide projectors, overhead projectors, micro computers, radio etc. cannot be ruled out.

However, when viewed in the context of resources available in the country and the magnitude of the problems, radio is the only medium which can face the challenge of reaching the masses in every nook and corner of the country. It can reach and cover the remotest hilly and tribal areas. Radio can penetrate not only distance but can also cross the barriers of languages, religion, customs and rituals because it is neither time bound nor place bound.

Radio as an effective audio aid is capable of providing valuable assistance to the teacher in the classroom by presenting worthwhile information and learning experiences simultaneously to a large number of students.

Realising the paucity of well sequenced and entertaining materials for young children the Government of India in collaboration with UNICEF established Children's Media Laboratory (CML) in 1977 at National Council of Educational Research and Training, New Delhi. CML has been actively working, with the objective of developing and exploring the simple, inexpensive and effective media of educational and entertainment value for two types of clientele.

- Children between 3 and 8 years of age
- Adults who handle young children

The materials developed by the CML can be grouped into four categories.

- Print and graphics
- Play material in wood/hard board/plastic
- Slides and video programmes
- Audio programmes

Apart from these materials and activities a major contribution of CML lies in its efforts to

network with All India Radio (AIR) and develop radio broadcasts as a powerful medium of education of young children.

‘Khilte Phool’ the Beginning

The proposal to use radio broadcast for young children was initiated in the third National Seminar on Audio Programmes for young children. In the inaugural speech Shri Amrit Rao Shinde, Director General, All India Radio, New Delhi suggested that the agencies like NCERT should adopt local stations and develop audio programmes to provide enriching and entertaining experiences to the children of socially and economically backward classes of the society. The suggestion was adopted as a major recommendation at the seminar.

CML immediately followed up the recommendation by preparing a detailed project proposal and submitted it to the Chief Producer, Central Educational Unit, AIR, New Delhi. After a series of meetings and discussions the proposal was finalised. In March, 1988 Kota (Rajasthan) was selected for the project and an innovative research project ‘Radio Feasibility Study’ was thus initiated.

Objectives of the Study

The objectives of the study were :

- To evaluate the potential of radio as a tool for providing enriching experiences to develop language and cognitive skills in the under privileged children
- To strengthen the competencies of teachers with the help of radio broadcast.

Strategy of Radio Broadcast

Each programme which is in capsule format with a specific theme, is of 10 to 15 minutes duration. It generally consists of a short

conversation on the theme—a song, a story and a game related to the theme. Each programme was prepared with an intention of providing entertaining and enriching experiences for the children based on day-to-day incidents and simple scientific concepts. These programmes are related to the following themes .

- Environmental Awareness
- Health, Nutrition and Sanitation
- Concept Formation
- Cultural Heritage, and
- Folk Tales (*Lok Kathayen*)

A set of 12 monthly guidebooks were provided for a total of 104 programmes to be broadcast over a year. Each guidebook had a total 8-9 audio programmes giving the programme details, objectives of the programme, pre-broadcast and post-broadcast activities to be carried out along with the radio programmes. Besides, the guidebooks monthly programme schedules having dates of the programme broadcast and repeating of the programmes were given to the Anganwadi workers and to teachers of Classes I and II to enable them to know about the dates of the broadcast and to write the reactions of the children during the broadcast.

The programmes were broadcast six days a week (in all the working days) spread over a period of one year (October 1988 to September 1989). Two new programmes were introduced every week and each of these programmes was repeated twice. For smooth implementation of the project timely monitoring, observation cluster meetings and refresher courses were organised.

Evaluation : Its Major Findings

After completion of a year of the radio broadcast (from 2 October, 1988 to 30 September, 1989) a comprehensive evaluation was undertaken

The results revealed that the Anganwadi children and children in Classes I and II who were exposed to the radio programme performed better than those who were not. It was also observed that the children of experimental group were more active, disciplined, punctual, curious to ask questions, had greater attention span, concentrated better, had better vocabulary and became more articulate as compared to their control group counterparts.

Also the Anganwadi workers and teachers of Classes I and II improved their teaching style. They adopted the play-way technique in teaching. The activity approach replaced the traditional methods of teaching. It was also observed that the Anganwadi workers became more tolerant and caring and understood the concept of holistic development of the child.

Based on the above findings this project was extended to other states to help enhance the competencies of the Anganwadi workers and supplement their activities through radio medium. To implement this idea a well thought-out project was formulated.

Children's Enrichment Experiment

The Childrens Enrichment Experiment through Radio (CHEER) Project is the further extension of this effort. This project was launched on 2 October 1992 initially for a period of one year, in four states viz. Andhra Pradesh, Haryana, Orissa and Uttar Pradesh. In Haryana and Uttar Pradesh, the broadcast is in Hindi and in Andhra Pradesh and Orissa the broadcast is in regional languages i.e. Telugu in Andhra Pradesh and Oriya in Orissa. These programmes are being broadcast by All India Radio Cuttack, Lucknow, Rohtak and Visakhapatnam stations. These AIR stations broadcast programme on all working days from 9.30 a.m. to 9.45 a.m. Guidebooks with the printout of pre-broadcast, broadcast and post-broadcast activities were supplied to the anganwadi workers. In Anganwadis pre-

broadcast and post broadcast activities were also demonstrated with the active participation of the Anganwadi workers.

Radio broadcast for the first year was over on 30 September 1993 from four AIR stations. In the second year broadcast was continued from AIR, Rohtak (Haryana) only, but was temporarily suspended from other three AIR stations. The third year broadcast is already started in Orissa by AIR Cuttack with effect from 2 October 1994 and the radio broadcast in three other states are proposed to be resumed very soon.

Some Suggestions

Keeping in view the past experiences from the radio feasibility study *Khulte Phool* and the on-going broadcast under CHEER project, the radio broadcast can be very useful for motivating and providing entertaining and enriching experiences to children who are in primary grades (especially the Classes I and II children) and strengthening the teachers competencies.

It has been learnt that in almost all the states radio/two-in-one sets have been supplied in the primary schools under the centrally sponsored scheme. So the primary school teachers can be asked to listen the radio broadcast under CHEER, only after they are being adequately trained under this programme. In case the radio sets are not supplied or if they are out of order then the teachers can take the children to their neighbouring Anganwadi centres for listening to the radio broadcast. As it was practised in Haryana the schools teachers can be provided some money (@ Rs. 25 per quarter) towards purchase of dry battery cells, if they borrow radio sets from the community or use their own for listening to the radio broadcast. Even the Solar Power Cell designed by Central Electronics Limited (CEL), Faridabad, which costs Rs. 250 only and has a warranty of 20 years can be supplied in the schools. In order to

supplement the radio broadcast monthly guidebooks having prebroadcast, broadcast and post-broadcast activities can be supplied to the primary schools by their respective State Government or by the NCERT.

Besides, the radio broadcast, the CML of the NCERT have brought out a set of 40 audio cassettes having four programmes in each cassette, making a total of 160 audio programmes. Each programme is of 15 minutes duration. These audio programmes are meant for the children of the age group 3 to 8 years. It has been learnt that very soon the NCERT is going to sell these cassettes in the market.

These audio programmes are based on day-to-day incidences and simple scientific concepts. These audio programmes provide the information to the children regarding fruits and vegetables, seasons, sanitation, health and hygiene, their immediate environment, cultural heritage, folk tales etc. in a very suitable and entertaining manner.

The existing programmes like, *Jungle Ki Sair*, *Keede Makodon Ki Sabha*, *Khana*, *Janwari ke Ghar*, *Nadi Kinare*, *Ek Din*, *Hawa* etc. have been meant for creating environmental awareness. The concept of health, nutrition and sanitation have been given through entertaining and stimulating programmes like *Bander Wala*, *Chusti Aur Sufram*, *Ankhon Ki Dekhbhai*, *Bimar Bachhe Ki Dekhbhai*, *Bansi Munia Ka Ghar*, *Durghatna* and *Sawdhan Raho*. In order to help the children become aware of our glorious heritage and culture, the programmes like *Dussehra*, *Diwali*, *Christmas*, *26th January*, *Holi*, *Id*, *Teej*, *15th August*, *Rakhi*, *Basant Panchami*, *Janmashtami*, *Spring festival* and *Baisakhi* have been included. In folk tales/ *Lok Kathayen* the programmes like the *Monkey and Capman*, *Tuk Tuk Grandmother Goes*, the *Parrot* and the *Cat*, *Gold from Mud*, *Tale Tattling Bear*, *Two Rats*, the *Story of Thirsty Maina*, the *Clever Rabbit*, the *Donkey's Brain*, *Tit for Tat*, *Friendship*, *Brave Friend*, *Talkative Frog*,

Crocodile and Monkey, *Forgetful Bholu*, *Stubborn Donkey*, *Aunt Spider*, etc. have been included to inculcate certain socially acceptable and approved values like friendship, unity, sharing, empathy, etc. in children.

In order to make the children aware of the general concepts, the programmes like, *One, One One*, *Visit to Zoo*, *Train is Moving Round*, *Listening*, *The Sky*, *Rhythm*, *The Washerman*, *Let's be Small*, *Box of Coal*, *Know by Touch*, *Vegetables*, *Winter Is Here*, *What Is Square*, *Green Colour*, *Seasons*, *Shadow*, *Game of Sound*, *Shoe*, *Fruit Juice*, *Coins*, *Horse Cart*, *The Postman*, *Policeman*, *Forms of Water*, *Ball with Seven Colours*, *Means of Transport*, etc. have been included. In order to supplement the classroom teaching on different themes and concepts the classroom teacher can playback these above mentioned cassettes whenever necessary so that the classroom teaching can be more interesting and lively.

Conclusion

The political reaffirmation to the goal of achieving Education For All (EFA) by 2000, signed by nine high population countries on December 16, 1993 in Delhi has marked new era in the history of Indian Education. No doubt, this world summit has provided the necessary impetus to all the on-going educational programmes in India. But to achieve this target by 2000 A.D. seems to be far reaching/ unrealistic.

In order to achieve this seemingly unrealistic goal we require more awareness of people and their sharpened desire than the resources or infrastructure. So we have to adopt a flesh and blood approach where things just have to be done which are not thought of or discussed. This is the right time where the intelligentsia, government, and people have to work together for a common goal, by adopting target specific and area specific programmes through multimedia approach.

Failure of UEE : A Few Thoughts

LALIT KUMAR
Lecturer in Education
MSTT College
Bharatpur, Rajasthan

Education is an inevitable vehicle of progress and development of a country. In a democracy, educated citizens are essential to choose their representatives without manipulation. Education, at least upto the elementary level, is considered essential for every individual. As per the Constitutional provision elementary education should have been universalised by 1960. The fact that in spite of efforts made to achieve this objective, the target is still to be achieved. In the present article the author analyses certain causes and reasons for this failure and suggests ways to improve the situation thereby. He lays emphasis on the civic consciousness and firmness of the government to achieve this goal.

It is universally acknowledged fact that an educated and enlightened citizenry is an essential condition for the successful functioning of a democracy. Education, at least upto the elementary level is considered essential for every individual in a democratic country. With the achievement of freedom, new objectives, demands and responsibilities were set up before us. The greatest challenge to the country at that time was mass illiteracy. It compelled the framers of the Constitution of free India to include a Directive Principle on Education in the Constitution so that democratic social order

could be built up. The provision of Article 45 in the Constitution that the State would endeavour to provide free and compulsory education for all children upto the age of 14 years by 1960, bore a sufficient testimony to the fact that elementary education was recognised as immensely important by the leaders to build up an intelligent citizenry for a democratic, socialist and secular society.

As per the Constitutional provision elementary education should have been universalized by 1960. The fact that in spite of efforts made to achieve this objective, the target

is still unachieved. Therefore, it has assumed an increasing significance with the passage of time. To achieve this target, we have to—

- (a) Universalise provision of school facilities
- (b) Universalise enrolment
- (c) Universalise retention in schools

There has been a steady expansion of schooling facilities but the effect of this achievement has been undone by the population explosion in the country. With our limited resources and lack of skilled teachers, it has not been possible to keep pace with the expansion in population and provide schooling facilities for the ever-increasing number of children. Provision of adequate schools for children in all areas is not the only solution to the problem. The more challenging problem before us is the non-enrolment of children even in those areas where schools have been provided. The main cause of non-enrolment is the poor economic conditions of children who have to help their parents in earning a livelihood. Besides economic reasons, parental indifference, irrelevant and uninteresting school curriculum and social and cultural traditions in the case of girls are great impediments in the way of universalisation of enrolment.

The problem of wastage and stagnation is ever more important factor which does not allow the universalisation of primary education. Wastage occurs when children leave schools without completing the elementary stage and usually lapse into illiteracy which results into wastage of their time and energy as well as wastage of national resources. Stagnation occurs when children do not take interest in study, fail to get promoted to the next class, and stagnate in a particular class year after year. Stagnation has a very demoralising effect on pupils and parents. Many a time, it leads to wastage as parents withdraw their children from schools

after their repeated failures. It is wastage in itself as it implies that time, energy and resources have not been well spent.

Programmes have been chalked out, actions have been taken, but the target of universalisation of elementary education is becoming elusive every day due to following main reasons.

- Population explosion
- Faulty curriculum and improper and insufficient equipment
- Lack of consciousness among parents and guardians
- Theoretical nature of programmes to be implemented
- Improper use of non-formal modes of education
- Economic conditions of parents
- Social taboo
- Lack of devotion among teachers.
- Lack of devotion among conscious persons of the society
- Local demand of the society is ignored
- Traditional method of teaching and improper evaluation

Analysing the causes and evaluating the process of universalisation of elementary education, following suggestions occur to gear up the target of universalisation of elementary education.

- Formal modes as well as non-formal modes of education should be utilized properly for the development of universalisation of elementary education.
- Arrangement of separate school for girls where parents are not willing to send their daughters to co-educational institutions.
- Appointment of a working group from the different strata of the society at

local, state and national level for universalisation of elementary education

- Preparation of master plans for the universalisation of elementary education at block, district, state and national level
- To make the guardians and students aware to the utility of UEE in order to develop their interest and motivation in the system
- Inclusion of better equipment and devoted staff in the system
- Improvement of curriculum to make it attractive, locally relevant and meaningful to children
- Development of textbooks and instructional packages on a decentralized basis which may introduce local relevant content
- Adoption of dynamic methods of teaching and effective mode of evaluation

- Absolutely free elementary education for children coming from economically backward families

- Proper implementation of various programmes initiated for UEE.

Government of India in last two decades have attempted to revamp primary education.

Government can chalk out the programme, can provide financial assistance, can frame law to be forced, but it is the society which can lead the nation to this target of UEE. Government cannot force an individual to act his best for this purpose, it is the individual himself or herself, who can help to the greatest extent. If the society understands the utility of UEE, and is firm to have it, only then the complete UEE can be achieved. For the same civic consciousness is the main factor, therefore through non-formal and formal mode of education the individual and finally the society should be convinced to achieve the target of UEE.

Effective Preparation of Teachers

M VENKATA SUBBAIAH

Lecturer

District Institute of Education and Training

B Thandhapadu

Kurnool (AP)

The great responsibility entrusted to every primary teacher is needed to be tackled effectively and efficiently. For the preparation of teachers there are two areas, one is pre-service teacher education and the other is in-service teacher education. Education being need-based teachers must be prepared to know suitable teaching learning strategies and teaching learning materials. A teacher is the friend, philosopher and guide for his students. So he should be able to provide necessary guidance to his students.

PREPARATION of teachers comprises of two components : (i) Pre-service teacher education, and (ii) In-service teacher education. Pre-service teacher education comprises of activities related to pedagogy and content in mending and transforming the education into the best possible teachers to face the task inside the classroom as well as outside the classroom in transforming the children into future citizens who can shoulder the responsibilities. In-service teacher education comprises of activities related to the orientation and re-orientation of the working teachers in pedagogy and content to face the task as and when new concepts are introduced in the field of education. .

In view of the needs of the children on par with the rapidly changing society and introduction of modern gadgets, our age old teachers who never attended the orientation programmes or continue education opportunities provided by the department to improve their professional calibre cannot meet the challenges inside the classroom and outside the classroom. So preparation of in-service teachers to face the task is really a cumbersome and stupendous job before the teacher educators wherein we have to introduce recent developments in content and pedagogy, better use of hardware as well as software technology.

For achieving the derivatives of the educational objectives (knowledge, understanding, application) teachers are trained in such a way as to meet the challenges inside the classroom. These specifications are taught to the students irrespective of their use in developing the required competencies to the students, to meet the day-to-day challenges.

Introduction of modern gadgets in the home environment and outside the home environment, drastic changes in our education system in relation to pedagogy and content are 'must' to develop competencies and to meet the challenges in daily life. Education being need-based, we have to prepare our teachers to know suitable teaching-learning strategies and teaching learning materials accordingly. For this National Policy on Education 1986 (Revised 1992) envisaged Minimum Levels of Learning (MLL) by providing suitable educational climate and to upkeep the interests of the teachers in the implementation of the activity-based learning in providing direct purposeful experiences in groups to develop competencies among the children in relation to cognitive, psychomotor, and affective domains. For this, curriculum is prepared and MLLs are listed out stage-wise. Preparation of teachers is in progress in the form of Special Orientation of Primary Teachers (SOPT) for in-service teachers. The concept of MLLs is already introduced in the PSTE course syllabus. MLLs are intended to improve the quality of education by maintaining equity and to achieve the competencies to mastery levels, stage-wise. By providing suitable experiences, children will be able to achieve the stipulated competencies where the teachers should play a vital role in the process of competency-based teaching, competency-based learning and well versed in the competency-based testing. How best the children are benefited through our schooling is very important rather than coming

and simply going. In our planning, top priority must be given to the learner-rather than teacher-centred one. Teacher should exclusively act as a guide and a facilitator who can facilitate, suggest and save at times of danger during the process of learning to develop competencies. It is the look-out of the teachers to develop good rapport with the environment and to provide or initiate the interaction between the learner and the materials that are available in the environment.

NPE 1986 (Revised 1992) intended in developing the competencies among the children by providing the suitable learning experiences using the materials supplied by the Government in the form of Operation Blackboard scheme. Audio-visual Education, better use of the Environment are other programmes. Integration of all (OB, AV, APPEP, and EV) the available resources in providing learning experiences in the form of activities in groups will enable them to develop the competencies. Efficiency of the teachers in providing suitable sensory experiences is the major part to be played during the process of activity-based learning. The most acceptable way of providing sensory experience is the direct purposeful experience where we can expect 100 per cent results in developing competencies to mastery levels. All students must be in a position to reach the mastery levels in the stipulated competencies. Criterion-based evaluation can alone measure how successful the programming is to meet the present day challenges in transforming the children into better citizens.

Preparation of teachers on these lines will adequately cater to the needs of the children, who need help as and when required. Now we are interested in the children's performance rather than the teacher. For this we have to equip the teacher to meet the challenges and to solve the day-to-day problems in and around the

school. Better exposure of the PSTE and in-service teachers to recent trends in pedagogy and content is must.

Establishment of District Institutes of Education and Training in the place of old teacher training institutes and Institutes of Advanced Studies in Education in the place of college of education and opening of comprehensive colleges of education in the selected regions are intended to produce better teachers comparatively and qualitatively, but quantitative aspect is being a hurdle before the progress of these institutes of education. Quality aspect can alone prepare the best and committed teachers who can face the task. Deterioration in the quality leads to immoral practices and fall in moral values.

Regional Institutes of Education sponsored by the NCERT are preparing the best possible teachers to cater to the present needs of the day keeping in view of the advancements in the field of education. These institutions are specially meant for developing professional competency in pedagogy and in content. The aspirants for these institutes are specially interested to do service in the field of education. The curriculum for the course is framed in such a way to develop the required competencies to face the tasks effectively. Also the degrees awarded as Bachelor of Science Education/Arts Education and Master of Science Education/Arts Education clearly emphasise and envisage that they are prepared with the particular motto. The teacher educators in the RIEs are also professionally well versed and well-equipped to meet the requirements in the preparation of the teachers from time to time. Some of the colleges of education run by reputed missionaries are taking keen interest in the preparation of the committed teachers to do service to education department in the process of helping the nation at large.

The State Councils of Educational Research and Training (SCERTs) are not blessed with the required supervision over the colleges of education and DIETs in the process of preparation of teachers. Though they are providing required academic support to the teacher educators in the form of orientation as and when required, the follow-up work and field interaction is not within their reach. Experts in the field of education will be given sufficient freedom and be placed in the SCERT on par with the University Departments. Appointments on the basis of promotion are to be curtailed or discouraged. The interest of the experts need to be safeguarded and they should be highly paid for, who are working as academicians in the education department.

Research facilities in the field of school education need to be increased. Provision and encouragement for the teachers working at grassroots level may be given top priority in the field of research. SCERT must have provision to undertake good number of research works and to guide the teachers in the field of research.

Suggestions

1. Selection of candidates for admission into the teacher training institutes may be on the basis of the performance in the aptitude test but not on the basis of SAT testing purely related to academic subjects.
2. Limitation of entry into the institutes depending on the facilities available for training.
3. Trained teachers must not feel frustrated before being absorbed by the department. Preparation of teachers in large quantities leads to deterioration in the educational values.

- 4 B.Ed degree through correspondence courses should be discouraged and at least first degree in education must be regularly attended by the aspirant, and period of training must be at least two years, internship for a period of six months under the guidance of an experienced teacher working in recognised school, to have better exposure in the recent trends. Course completion certificate will be the criterion in the place of pass or fail system
- 5 Teachers should be specially trained for pre-primary, primary and secondary levels with specialisation in those aspects should subsequently be appointed in the particular field. Irrespective of the levels of education whether it is pre-primary, primary or secondary salaries should commensurate with the qualifications. More qualified and proficient or experts in the particular field be at the foundation level in pre-primary, primary where the children required perfect guidance and help for the progress. Only children blessed with good primary education perform better in future education and this experimental truth is revealed through our educational researches.
- 6 For every three years all teachers must utilise opportunities to undergo intensive orientation in pedagogy and content for not less than 30 days during the vacation, in the reputed colleges meant for this purpose exclusively with all the required facilities for training.
- 7 More research facilities need to be made available to the teachers working at grassroot level to take up and to find solutions for the problems. The

research findings should have wide publicity among the implementing agencies. Linkage between research agencies and the administration is a must while planning

- 8 Pre-service teacher education need to be strengthened by training the would be teachers according to the recent trends in the field of education
- 9 DIETs and institutes of advanced studies should be kept open to the teachers as well as researchers to clarify their doubts and also to utilise the resources that are available to improve their professional competencies and to meet the present day challenges in the field of education
- 10 Literature produced in the field of education may be supplied to all the teachers for the use and to meet the needs of the children
- 11 There should be provision to meet the recurring expenditure to provide teaching learning activities in the school.
- 12 Materials supplied by the department should be need based. Proper use of these materials should be checked and if not in use, remedial work may be initiated. Teachers should be specially trained to operate the equipment related to audio-visual, specially prepared kits and computers
13. Every year teachers should be guided in the preparation of year plans, period plans and to incorporate advancements in the field of education and to avoid stereotyped way of teaching.
14. In the appointment of teacher educators priority should be given to the experienced and enthusiastic teachers.
15. Autonomy for the SCERT to guide and supervise the programmes, and inter

change of experts from the universities will improve the quality.

16. Increasing the visits of the subject experts to give proper guidance to teachers and setting up of experimental schools for try-out by the experts.
17. Workshops cum seminars in the place of teacher centric meetings under the guidance of the experts from the training institutions
18. Teachers should be frequently allowed to participate in work-shops, seminars, science-cum-educational exhibitions, field trips, excursions and social service activities. Club activities should be given priority
19. All teachers should invariably be trained to undertake action-research projects to solve the problems related to the infrastructural facilities as well as problems related to academic excellence and quality.

20. Special orientation of teachers in the non-cognitive areas or para-curriculum must be implemented for the all round development of the children.

21. NCERT must be the focal point to govern the teacher education via SCERTs at state level and DIETs at districts and sub-DIETs as branches.

Loopholes in teacher education will certainly deteriorate the quality of education. Effective preparation of teachers is essential for the better development of the children. Commitment on the part of the teachers also plays a vital role in carrying into our classroom and better use of the materials supplied by the department as well as the facilities available in the environment. Teacher educators must carefully plan and conduct the programmes to cater to the needs of the teachers in developing professional competencies to meet the challenges and to face the task.

National Council for Teacher Education

16, Indraprastha Estate
Bharat Scouts and Guides Building
Mahatma Gandhi Marg, Ring Road
New Delhi 110 002

The National Council for Teacher Education (NCTE) has been established by an Act of Parliament (Act No. 73 of 1993) with a view to achieve planned and coordinated development of the teacher education system throughout the country as well as for the regulation and proper maintenance of norms and standards in teacher education. Functions of the NCTE include laying down norms and standards for recognition of programmes for existing institutions as well as providing guidelines for compliance while starting new courses for training.

The NCTE has been specifically asked to take all necessary steps in preventing commercialisation of teacher education, to evolve suitable performance appraisal systems for enforcing accountability, to promote innovation and research in various areas of teacher education and to disseminate results thereof and to set up new institutions for teacher development programmes.

The NCTE Act stipulates establishment of the Council's Headquarters in Delhi and four Regional Committees, one in each region.

The functions of the NCTE are

- (a) Undertake surveys and studies relating to various aspects of teacher education and publish the result thereof ;
- (b) Make recommendations to the Central and State Governments, University Grants Commission and recognised institutions in the matter of preparation of suitable plans and programmes in the field of teacher education ;
- (c) Co-ordinate and monitor teacher education and its development in the country ,

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